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This Minnesota Curriculum Center report recounts the development of teaching materials on the nature and uses of language for grades 7-12 and presents the first of five seventh-grade units. A description of the origins, purposes, and personnel of the Center is followed by brief discussions of (1) the Center's underlying assumption that a study of language provides the organizing focus for an English curriculum, (2) the demonstration procedures of the Center, and (3) the individual units developed. The major portion of the report is comprised of the unit for grade 7 which establishes a definition of language and introduces the concept that language is a coded system of learned, conventional oral symbols. Lectures, inductive questions, exercises, and such materials as Helen Keller's autobiography and Lewis Carroll's "Through the Looking Glass" are used to help students perceive the basic characteristics of spoken language, its possible origins, its personal and social importance, how it is learned, and how it both resembles and differs from other coded systems and from communication among animals. (See also TE 001 261, TE 001 263-TE 001 273.) (JB)

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THE MINNESOTA PROJECT ENGLISH CENTER

Selected Materials
from the

Center for Curriculum Development in English
214 Burton Hall
College of Education
University of Minnesota
Minneapolis, Minnesota 55455

Fall, 1967

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TE 001 260

Instructional Units
developed by
The Minnesota Project English Center

Unit 701	Introduction to the Study of Language
Unit 702	Changes in the Meanings of Words: I
Unit 703	The People Who Study Language
Unit 704	Introduction to Transformational Grammar
Unit 705	Syntactic Relationships
Unit 801	Our System of Spelling
Unit 802	Language Varies With Approach
Unit 803	Structures of Time, Mode, Manner, and Causality
Unit 804	Structures of Specification, Place, and Number
Unit 805	The Dictionary: Describer or Prescriber?
Unit 901	Language Varies With Backgrounds and Interests
Unit 902	Changes in the Meanings of Words: II
Unit 903	Approaches to Grammar
Unit 904	Structures of Emphasis in Paragraphs
Unit 905	A History of the English Lexicon
Unit 1001	The Nature of Meaning in Language
Unit 1002	The Modes and Functions of Discourse
Unit 1003	The Language of Exposition
Unit 1005	Grammatical Formations
Unit 1006	Learning Our Language
Unit 1007	Dialects and Social Stereotyping
Unit 1101-A	Language Varies by Place: American English
Unit 1101-B	Language Varies by Place: English in Other Countries
Unit 1102	The Language of Persuasion
Unit 1103	The Nature and Evaluation of Argument
Unit 1104	An Outline of Grammatical Elements
Unit 1201	A Historical Study of English Phonology, Morphology, and Syntax
Unit 1202	The Language of Evocation
Unit 1203	Social and Psychological Implications of Language
Unit 1204	The Evaluation of Persuasive Discourse

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Preface

The purpose of this booklet is to acquaint teachers, curriculum specialists, and administrators with the work of the University of Minnesota Center for Curriculum Development in English (The Minnesota Project English Center). This Center, funded through a contract with the Cooperative Research Division of the U.S. Office of Education for the period from June, 1962, through June, 1968, has been devoted to the development and preliminary evaluation of a series of teaching materials on the nature and uses of the English language for grades seven through twelve.

Briefly stated, these materials proceed from the assumption that the study of the nature and uses of the English language provides the logical basis and focal point for the English curriculum by establishing a structure in which the study of literature, oral and written composition, and other aspects of the English curriculum can be meaningfully interrelated through the focus on the English language. The work of the Center has been an attempt to utilize the expertise of secondary school classroom teachers and university personnel in the development of teachable resource materials that appropriately reflect what is currently known about the nature and uses of the language.

We emphasize at the outset that the materials developed by the Center are not intended as a complete curriculum in English, and that these materials are not intended as "packages" which can be taught in any situation without adaptation. They are, rather, intended as a basic structure around which local curriculum development, revision, and implementation might proceed.

The materials included in this booklet are necessarily brief, compact, and truncated. Much of the material is derived from a longer statement describing the rationale for a language-centered curriculum which is now under development by the staff of the Center. This statement will be available from the Center by June, 1968.

Publication arrangements for the units themselves are being negotiated at this time. The Center maintains a file of persons who have expressed an interest in the units, and when publication arrangements have been completed, an announcement will be distributed. Persons who would like to receive the materials when they are released should contact the Center.

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INTRODUCTION:

The Origin of the Center

The University of Minnesota was one of several educational institutions and agencies invited to apply for funds made available under the provisions of Public Law 531 of the Eighty-third Congress. This law allowed uncommitted funds available in the United States Office of Education to be used in areas of pressing need, and English was identified by the USOE as one such area. In short, the English projects of the U.S. Office of Education grew out of permissive rather than specifying acts of legislation.

The original proposal of the Minnesota Center was submitted in January, 1962. A review and selection committee of the USOE recommended that the first curriculum study centers be established at Hunter College of the City University of New York, the Carnegie Institute of Technology, and the University of Nebraska. The proposal of the University of Minnesota was returned for revision and re-submission. The revised proposal, submitted in June, 1962, was accepted by the USOE, following which time the Minnesota Center and three other centers were funded to begin work in fiscal 1963. Since then more than twenty Project English Centers, varying widely in size, shape, and approach, have been funded.

The Purposes of the Center

The Minnesota Center proposed to have representatives of the College of Education, the English and Speech Departments of the College of Liberal Arts, and selected secondary school teachers cooperate in the development, evaluation, and dissemination of curricular materials for the study of language in grades seven through twelve. Developing materials and study guides, then, has been the major objective of the Minnesota Center. Another major objective, closely related to the first, has been preparing classroom teachers to use the developed materials in pilot and evaluation programs in the schools. Another objective has been the development and dissemination of explanatory brochures for use by curriculum study groups in schools, by teacher education specialists, by teachers of English and other languages, and by educational publishers. The development of tests of linguistic sensitivity based on concept and attitudinal measurement has been another goal of the center's activity. A further general purpose of the Minnesota Center has been the investigation of potential relationships of the seventh through twelfth grade materials with elementary school programs and beginning college courses in language, communications, and rhetoric.

Key Personnel of the Minnesota Center

The Minnesota Center regards the high degree of cooperation between the College of Education and the College of Liberal Arts as a most significant aspect of its program. The Center's work demonstrates that scholars from a variety of academic disciplines and pedagogy can effectively function as a working team in the development of curricular materials. The extent of this cooperation is illustrated by noting that the Center is directed by one Professor of Education, one Professor of English, and one Professor of Speech and Theater.

Stanley B. Kegler, Professor of Education, Director of the Minnesota Center, and Associate Dean of the College of Education, has over eighteen years of experience as a high school and college teacher. Since 1958 he has directed undergraduate and graduate studies in English Education. He is past-Executive Secretary of the Minnesota Council of Teachers of English, a member of the Executive Committee of the Conference on English Education of the N.C.T.E., a consultant on listening to the Educational Testing Service, a former contributing editor to the English Journal, and the author of several articles on education in English.

Harold B. Allen, Professor of English and Associate Director of the Minnesota Center, has forty-one years of experience as a college teacher of the structure and history of the English language, communication, and rhetoric. He has directed graduate studies in communications; has been a Fulbright and a Smith-Mundt Visiting Professor of Linguistics at 'Ain Shams and Cairo, United Arab Republic; is the editor of the widely-used Readings in Applied English Linguistics, past-chairman of Conference on College Composition and Communication, and past-President of the National Council of the Teachers of English.

Donald K. Smith, Professor of Speech, University of Minnesota Associate Vice President for Academic Administration, and Associate Director of the Minnesota Center, has taught English, speech, classical rhetoric, argumentation and persuasion, and the psychology of speech during thirty years of high school and college teaching. He is a former chairman of the Department of Speech and Theater and has directed the fundamentals of speech program. He has written numerous articles on speech, rhetoric, and education. Presently he is a member of the Advisory Council of the National Council of the Teachers of English, and has been President of the Central States Speech Association and President of the Minnesota Association of Teachers of Speech.

The leadership provided by the directors has made it possible to engage representatives of several departments of the University in the work of the Minnesota Center. Among those who have devoted substantial portions of their time are Lee Pederson, formerly Lecturer in English and now Associate Professor of Linguistics at Emory University, who has worked on grammar and dialect materials; Donn Parsons, now Assistant Professor of Speech at the University of Kansas, who worked on persuasion and rhetoric materials; Gene L. Piche, Assistant Professor of

Speech and English Education, who has also worked on rhetoric materials; Rodger Kemp, Instructor in the College of Education and Project Supervisor, who has done administrative work and has written and edited materials; and Thomas Bacig, George Robb, and John Caddy, Instructors at University High School, who have written and edited numerous materials. On a consultantship basis scholars representing sixteen fields of study and five colleges of the University have advised the Center on problems ranging from language learning to the design of a program of evaluation.

CURRICULUM DEVELOPMENT:

The Problem for Curriculum Development

Linguistic scholars have developed an extensive body of knowledge (both information and concepts) about language. Thus, a quantity of reliable information is available to the mature student of language. Little of this body of knowledge or of its applications to the English language has penetrated the secondary school curriculum, however. Few colleges require or even offer a systematic course for prospective teachers in the nature and structure of the English language. Information long known to linguists has had little influence on attitudes and instructional techniques of teachers. At present only a few texts specifically devoted to the structure of English are available for use in high schools. Even these do not provide the teacher with the background for a systematic approach to instruction in language, nor do these few sources provide a sequential program of instruction for secondary school students.

Important as the study of the structure of the language may be, it by no means exhausts the resources of language scholarship. That is, language study is not synonomous with study of theories of grammar. Information and concepts about language from scholarly areas such as rhetoric, communication theory, semantics, behavioral sciences (psychology), social sciences (such as anthropology), and specialities within "linguistics" such as history of English, lexicography, and dialectology have implications for the substance and form of the English curriculum.

By virtue of their training and interests, most high school teachers of English do not seek out information and concepts from sources such as those just cited. English teachers, when they have a major in English at all, have typically completed undergraduate programs devoted largely to the study of literature. Still English teachers are called upon, and they usually accept the call, to teach more than literature. And although the CEEB's Freedom and Discipline in English found the assertion "unstartling", it is still worth asserting that a concern with language is central to the teaching of English, including teaching the artistic use of language in literature.

To be sure, there are some encouraging signs of revitalized interest in language study which includes but is not limited to the structure of the language. Several Project English centers have developed impressive and exciting materials about the nature and uses of English. Increasing numbers of new textbooks attempt to incorporate new materials, although sometimes in curiously fragmented ways (e.g., three pages about word order in English in the twelfth grade text of a six-year series). NDEA institutes have followed the lead of the CEEB institutes of 1961 and 1962 in planning language components for their programs. Undergraduate teacher education programs increasingly include courses in the nature of the language, usually some aspects of structure or history.

Despite these encouraging signs, present instruction at the secondary school level still tends to be incomplete and disorderly, with the result that reliable knowledge about language is not widely shared. Secondary school students receive "bits and pieces" of knowledge which do not provide a reasonably complete view of the nature of language and the ways in which language functions. High school students may know some concepts about standard usage or prescriptive grammar; typically they know little about the insight brought to the study of language by descriptive linguistics and nothing about its extensions through transformational grammar, or about the systematic structures which characterize language. They may have some notions about the way in which language is adapted to its end in acts of exposition and persuasion, but they lack any systematic study of rhetoric, or of the theory of expository or persuasive address. They may have some ideas about critical thinking, or about the scientific method as reflected in discourse of all kinds, or even be able to identify some of the commonplace linguistic fallacies. But they are unlikely to have had any systematic instruction in logic, even though the bits and pieces about critical thinking and fallacies tend to be derivations of the study of logic. They are likely to have little or no understanding of the relationship between the development of speech and the nature of man, or between language and culture.

To summarize, secondary school students, in the main, complete their education in the high schools with a meager understanding of language and its many facets. Even under the best of conditions, they may well understand a few of the basic principles of "linguistics", but be quite unaware that the study of "structural linguistics" is only a part of the study of language.

If systematic knowledge of language is unavailable to secondary school students, it is equally unavailable to college students and almost non-existent for students in elementary schools. Specialization of language study has fragmented the systematic study of discourse provided in classical education through the trivium of grammar, logic or dialectic, and rhetoric. The knowledge about language in the last half century has been developed through the work of many disciplines, with students of linguistics, philosophy, psychology, anthropology, speech, psycholinguistics and literature all contributing to the expansion of knowledge. The specialization of the study of language and literature which has occured in higher education has brought the familiar problem that such knowledge is not readily available in any synthesized form to college students. The reciprocal effect on the secondary school curriculum has been that even the best prospective teachers of English and speech often bring to their teaching a narrow and highly specialized view of the nature of language. The "bits and pieces" of knowledge represented in their own specialized studies are reflected in the "bits and pieces" of instruction about language in the secondary classroom.

Assumptions Underlying the Work of the Minnesota Center

Underlying the work of the Minnesota Center are a set of assumptions about what is to be taught, the nature of the learner, and the use of the materials by the teachers.

The assumptions shaping the substance of the curriculum imply both broad and varied attention to the most distinctly human behavior, language. They imply the adoption of a variety of perspectives from which curricular materials and emphases may be derived in the direction of a broadened and deepened study of man. They imply commitment to an integrative center where the humanities and the modern sciences of man meet. That center is the study of language, broadly conceived. That broad conception suggests extending our range of study in the direction of certain conceptual sets. The Minnesota Center has assumed conceptual sets formed by the large concepts of structure, culture, learning, and communication.

Structure

The first, and in many ways the primary concept, is structure. In the approach to the specifically defined phenomena of modern linguistic study, the concept of structure has proved most fruitful. Its adoption has been in large part responsible for the growth of information about language compiled by scientific linguists over the past half century. Structure for the linguist has meant a preoccupation with a variety of systematically, that is to say structurally, defined interrelationships in the mechanisms of spoken language. The description and inventory of such interrelationships as they pertain in the phonological, morphological, and syntactic systems of a great variety of language communities has extended our knowledge of the range of human languages and human language mechanisms.

But just as the concept of structure provides a focus for studying the more narrowly defined phenomena of language, it similarly informs perspectives appropriately styled macro-linguistic. Certainly the structural concept applied to the analysis of patterns in larger units of language or discourse owes a debt to the architectonic impulse of the ancients as great as its debt to modern science. And, of course, notions of structure in the oration, in the drama and in poetic theory remain viable both in the what and the how of much that we continue to teach. If the impulse is ancient, certainly the increased rigor is modern, and is revealed in the attention to structure of warrant licenses in logic and ordering perceptions in psychology. It is no less apparent in the analysis of patterns of social organization and culture traits in modern sociology and anthropology. Throughout such studies, and particularly as they depend on the phenomena of language, adoption of a structural concept appears as prerequisite to developing theories of maximum simplicity, consistency and completeness.

Culture

Any brief exposition of the perspective afforded by the concept of culture must avoid the subleties arising from varying definitions of the term. We will instead assume with Kluckhohn that most behavioral scientists formulate it in roughly similar terms. Thus,

> culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional (i.e., historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other as conditioning influences upon further action.[1]

The complex of shared patterns of behavior with resultant predispositions toward future behavior that are characteristic of a particular human group may, then, be identified as a given cultural context. Since the abstractions made are of similar kinds of phenomena, the descriptions range from homogeneous, pre-literate groups to large, heterogeneous groups in modern, industrial societies. Moreover, by extending these abstractions the culture scientist may identify smaller groups or subcultures and describe their ordering within the larger culture's context. And even if such conceptual dividing lines are not yet firmly staked out, they are based on the "significant structure points in cognitive and value systems."[2]

Such a notion of culture context, cutting across biological, social and historical-geographical dimensions of human behavior, is, of course not necessarily coterminous with geographic, racial, or linguistic boundaries.

A perspective emphasizing the intimate and reciprocal relation of language and culture affirms a theory of meaning which transcends the purely formal or grammatical. The linguist, as linguist, tends to limit attention to the context of the formal characteristics of the language system, while addition of the cultural perspective implies an extended attention to the total situational context within which utterances occur. It argues a conception of meaning which "must burst the bonds of mere linguistics and be carried over into the analysis of the general conditions under which a language is spoken." [3]

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[1] Clyde Kluckhohn, Culture and Behavior, ed. Richard Kluckhohn, New York, The Free Press of Glencoe, 1962, page 73.

[2] Ibid, page 66.

The implications of a cultural perspective for framing and enriching language study in the schools are broad and significant. Recognizing language as the tissue of groups, we may be able to devise better schemes for attacking problems of style and usage. Curricular attention to the reciprocities of language and culture ought to provide greater resources in approaching the tools and the task of lexicographers. Finally, such a concept carries its own attack on the arrogance of historical and linguistic parochialism. The humanizing dimension rests in such an extension of perception. "We shall no longer be able to see a few recent dialects of the Indo-European family, and the rationalizing techniques elaborated from their patterns, as the apex of the evolution of the human mind. . . . They and our own thought processes with them, can no longer be envisioned as spanning the gamut of reason and knowledge but only as one constellation in a galactic expanse." [4]

Learning

In adopting the term "learning" to describe the tentative theoretical boundaries of a series of concepts relative to the study of language, we wish to deliberately emphasize the intimate relations pertaining between the psychophysical aspects of human speech production and the development or association of conventionally defined cognitive categories operate in a given cultural setting. In addition, thus, to emphasizing the interlacing of the major conceptual sets here described, the term "learning" is intended to call attention to the increasing accumulation of knowledge of linguistic phenomena deriving from studies most generally considered psychological.

The adoption of such a conceptual frame further implies recognition of what is by now a truism. Language is behavior, developing by an infinite number of adjustments in and by the organism. The boundaries of the concept are pushed back by the further assumption that certain aspects of behavioristic emphasis in explaining the process of language acquisition do not cancel but the view of that same language as cognitively-mediated symbolic action. Thus, language, as behavior, "is an instrument for action. The meaning of any word or phrase is . . .the difference its utterance brings about in a situation." [5]

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[3] Bronislaw Malinowski, "The Problem of Meaning in Primitive Languages", in C. K. Ogden and I. A. Richards, The Meaning of Meaning, New York, Harcourt Brace & Co., 1946, page 306.

[4] Benjamin Lee Whorf, Language, Thought and Reality, ed. John B. Carroll M. I. T. Press, 1956, page 218.

[5] Clyde Kluckhohn, Mirror for Man, New York, McGraw-Hill, 1954, page 115.

Both in the acquisition of a set of phonemic categories and in the intimately related acquisition of non-linguistic categories of experience, the impact of culture in shaping cognition is apparent. Thus, as the relation between cognition of phonemically structured sequences is associated with culturally delimited aspects of classes of experience, the symbolic character of language is emphasized. It is the cognitive recognition of structural patterns of regularities of linguistic behavior which provide the learner's initial clues for learning to categorize non-linguistic experience. The concept emphasizes the process of category formation of both linguistic and non-linguistic phenomena. The concept further assumes that the learning of particular categories of non-linguistic events if facilitated by cognitive filtering of category attributes facilitated by the linguistic event's presence in a given form class or structural context. The difficulty of establishing reliable categories of expectancy from the total and unsystematic stimuli to which the organism is subjected from birth is progressively transcended through the agency of learned, structured, symbolic behavior - language. And the learning concept, as translated into an analysis of language acquisition emphasizes the function of human speech as "the primary instrument of cognitive socialization."[6]

Communication Concept

The adoption of a communication concept is intended to focus curricular attention on certain very ancient and very modern aspects of large scale language theory. Attention accordingly is directed to such features as they are abstracted from the history of classical rhetorical theory and is extended to include certain major conceptualizations developed in the present century by communication theorists. The assumption, clearly, is that communication theory, ancient and modern, is a living and growing body of significant information and conceptualization. The dimensions of the concept argue the need to provide rhetorical education whose scope and implications transcent the offering of minimal advice in writing sentences and paragraphs.

Abstractions from modern communication theory similarly establish concern for a broad theory of interpersonal, linguistically-mediated behavior. The accumulation of conceptual frames and experimentally validated descriptions constitutes, from this view, a continuing resonance with classical rhetorical theory and provides a growing body of information relevant to an expanded language curriculum. The communication scientist's development of models incorporating concepts of encoding, decoding, channel, message, feedback and noise illustrates a persistent concern with the total rhetorical process. Similarly, modern studies of the content characteristics of persuasive communication, including the nature of argumentative appeals, ordering of arguments and the relative impact of "openness" of conclusions, contribute directly to modern theory of argument. Equally significant, and certainly related, are theoretical frames or typologies of language use deriving from the study of the referentiality of language symbols in conjunction with analysis of the appraisive and evaluative functions of such language.

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[6] Roger Brown, Words and Things, New York, The Free Press of Glencoe, 1958, page 195.

A great deal has been written in an attempt to ascertain the causes of communication failure. Rejecting the notion that linguistic intention is primarily shaped by logical rules, writers have stressed the "phycho-logic" of human language habits. General semanticists, to avoid more gross communication failure, stress the analogy of the map and the territory. The semanticist, in stressing the implicitly evaluative function of most interpersonal language has contributed to a sharper understanding of causes of failure. Additional studies, sociopsychological in origin, have emphasized the implications of the close relationship between language and social structure and between interpersonal tension and processes of cognitive stereotype. It seems fair to say that the general impact of the various perspectives for observing communication failure stresses the relativity of human judgment.

To summarize, the communication concept begins with recognition of the interrelation of language and social systems, and assumes that language provides the indispensable agency of human social control. The extrapolation of certain concepts of the ancient tradition in conjunction with an expanded attention to modern theory is intended to assert the pragmatic functions of language in that social matrix. Thus, the communication concept implies direct attention to the larger units of speaking and writing important in the communication system of a given society. The concept directs attention to the analysis of certain internal characteristics of such discourse as they relate to the effects achieved in the total scene or setting.

The assumptions the Minnesota Center has made about the nature of the learner can be discussed in three categories:

Psychological development

In learning, the child's cognitive capabilities develop gradually through a control of the specific and concrete toward a control of the general and the abstract. For example, in learning to control reference relationships the child names first the specific objects and people in his immediate environment. Terms having reference to high-order abstractions are learned later. Piaget and later Bruner, have outlined in recent works the nature of this development. Bruner has suggested the application of this concept in organizing materials for instructions. The notion of the spiral curriculum, in which the child is introduced systematically to a hierarchy of concepts organized in ascending levels of abstraction; implies that a given concept may be treated several times with expanding abstractness and generality. Thus, the "spiral approach" in this Center is characterized by the repeated treatment of certain basic topics or subject matters.

Social development

In the process of socialization, the child's ability to relate to others gradually increases. The works of Bruner and Piaget suggest that initially children's motives in using language are autistic and that subsequently motives such as the communicative and analytic develop with an increased awareness of "other". Similar suggestions can be found in the earlier writings of George Herbert Meade. As the child increases his flexibility in using the language, it is possible for him to relate to a broader segment of his language community. This process has implications for the treatment of dialect and usage variations in the teaching of language.

An additive approach to usage and dialect questions is consonant with the process of socialization outlined here, whereas the replacement (or "substitutive") approach frequently and traditionally advocated can no longer be considered useful. That is, it seems important that we discuss, without making value-judgements, the ways in which varieties of usage are appropriate or inappropriate only in reference to specific contexts.

Language development

By the time the child reaches school age, he has mastered a "knowledge of" his language. He operationally controls the structure (grammar) and a portion of the lexicon of his language, and some conventions and lines of argument of his linguistic community. Brown and Lenneberg have shown that typically this "knowledge of" language is both biologically and sociologically determined. All this implies that instruction in language can assume a prior experiential base for such instruction. Instructional materials and instruction, then, can and should develop from and relate to the child's immediate and available knowledge of language; his prior knowledge should be taken into account and brought, whenever possible, to the conscious level.

The Primary Concern of the Center Materials

The Minnesota Center has as its primary concern a broad study of language rather than the study of composition and literature. The latter studies without doubt are important components in any total English program; the Center materials are intended not as a complete program but as a portion of the English curriculum. However, while composition and literature are not primary emphases, they are of concern throughout the materials.

The Center has proceeded on the assumption that the most serious deficiencies of available instructional materials lie in the treatment of the nature, forms, and functions of the English language. Until recently, it was fair to cite an almost total lack of linguistic information and concepts in materials prepared for the secondary schools. Traditional rhetoric was represented only in emaciated form; contemporary rhetoric was represented not at all. Linguistic science in the sense of descriptive and transformational grammar, history of the language, dialectology, and lexicography was virtually ignored. Logic was introduced only casually and not even casual interest was shown in the linguistic dimensions of the behavioral sciences.

More recently, a few important steps have been taken. Topics from linguistic science have been introduced into some secondary school materials and a number of texts are controlled by linguistic findings. Yet the ratio of such materials to others is small and those materials stressing linguistic principles tend to limit themselves to some version of descriptive or transformational grammar, important but by no means inclusive aspects of language study. Other aspects of language scholarship are still lacking in secondary school materials, or they are so incompletely represented as to be, in the words of a recent criticism of high school texts, "gratuitous information."[7] This inadequacy of treatment of language study, then, is the primary problem to which the Minnesota Center has directed its attention.

The Center's primary concern with language study is conceived as facilitating further steps toward a unified curriculum in English. It is assumed, in other words, that a language-centered approach is not antagonistic toward the study of composition and literature, but complementary. Indeed the goal is not the simple composition of language, literature, and composition in a tolerable but somewhat uncomfortable position; rather it is to put down a foundation for the revitalized study of language leading to a true synthesis of these inter-related topics.

The Grade-level Emphases of Materials

The materials developed by the Minnesota Center are intended for use in grades seven through twelve. No limitation of student audience (high ability, college-bound, culturally disadvantaged, etc.) was specified. Of first-order importance in reaching the decision to concentrate on the secondary school level was the special background and interests of the directors and other personnel. Two of the three directors, Professors Kegler and Smith, are former high school teachers; all three of the directors have been actively involved in a variety of teacher education programs. The resources of University High School on the Minnesota campus were conveniently available to the center, providing an important source of personnel, a setting for initial testing of materials, and physical facilities for operation.

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[7] Martha Ferguson, "MPEC Language Units and Junior High Textbooks." Minnesota English, Volume II , Number 2. April, 1966.

A further consideration in the decision to concentrate on the secondary school level was the need to keep the project within manageable limits. A K-12 or K-14 range is most likely preferable for most curriculum projects and clearly preferable for one such as Minnesota's which aspires to a spiral design and which introduces material heretofore not included in courses of study. But the limits of time and available resources required some limitation of scope.

Finally, it is assumed that there is a strategic advantage in concentrating on grades seven through twelve, since there is a potential for expansion in either direction. In many important respects the upper-years of elementary school and the beginning years of secondary school over-lap. If the materials and approaches of the Minnesota Center demonstrate their worth at the junior high school level, they may serve as a starting point for developing comparable materials and approaches for elementary school use. In similar fashion, the Minnesota materials may have relevance for beginning courses in language at the collegiate level.

Of even greater significance than the assumed potential for expansion is the need for expansion, especially into elementary school programs. For example, it is difficult to overestimate the role of elementary school teachers and programs as one analyzes whatever impact formal education has on the linguistic habits and attitudes of students. If the habits and attitudes which the Minnesota materials presume to nurture are defensible and desirable, it is crucial that discussion proceed on how the materials may be adapted for elementary school classrooms. In limiting the materials to the seventh through twelfth grades, then, the Center did not assume that a broader range was not desirable; instead, the limitation was conceived with the intent of future expansion and in the spirit of first things first.

Curriculum Development Procedures of the Center

The activities of the Minnesota Center leading to the development of the materials outlined below began with a planning stage which included staffing the center, building the conceptual frame around which the materials were to be developed, determining the pedagogical method to be used in their structure and presentation, and deciding upon the unit approach.

The next stage, development, began with allocating information and concepts to units and grade levels which seemed to be appropriate. This allocation was not typical in the sense of designating a specific area of language study to a particular grade level or unit, but instead was done in the context of a spiral approach, stressing successive exposures to a series of increasingly sophisticated versions of the same general concepts. Tentative outlines of units, a large sample unit, and content outlines were written for use during the development stage. In the summer of 1963, thirteen classroom teachers, selected from approximately 220 applicants, were awarded fellowships to participate in a program which provided course-work background in the structure of the English language, psychology of language, and curriculum development. These teachers, with six others who were paid by their own school systems, were asked to write preliminary drafts of selected units. They then used those written materials in their classrooms the following fall. This began the pilot study stage of the project.

During the 1963-1964 school year, reactions to the materials by both students and teachers furnished the beginning point for revision of the materials during the summer of 1964. Twenty-four fellowships were awarded for this program, the teachers following essentially the same schedule as that of the previous summer. The previously written materials underwent major revision, and additional materials were drafted.

The 1964-65 school year saw continued revision and development of the materials by Center staff members and continuing use of the materials by teachers. The following summer eight fellows, all of whom had helped write and had taught the materials, worked on revision of existing materials and initial development of additional materials, including a series of units based on a transformational grammar. The extensive revisions of the summers of both 1964 and 1965 were made by teachers as a result of direct experience with teaching the materials in public school classrooms.

Development and revision of materials continued through the 1965-66 school year. While some major revision was done, minor revision and supplementation was the primary activitiy in the summer of 1966. Supplementary materials such as unit tests, teacher bibliographies, and extended student activities were developed for many of the units.

A total of thirty-one teaching units are in varying stages of preparation, most in final form. In addition to the basic units, correlated booklets of student readings related to each unit and analyses of concepts contained in each unit are being or have been developed.

All the materials are presently being used in sixty-six Minnesota public schools, and a combination questionnaire and free-response evaluation form is being used with both teachers and students to collect responses to the materials. The feedback obtained in this field testing is being used in the continuing process of revision and supplementation. This continues the emphasis throughout the development and pilot study phases of the program on revision growing out of actual classroom experience with the materials.

The Materials Developed

The Minnesota Project English materials emphasize a wide variety of concepts drawn from several disciplines concerned variously with the structure, history, acquisition, and semantics of language, as well as the socio-cultural and psychological implications and uses of language. The following broad definition of language serves as the basis for delineating a conceptual framework for the materials: language is the system of learned, conventional oral symbols held in common by the members of some community for the conduct of relatively precise patterns of human interaction. There are two major components of this definition: the nature of language and the uses of language.

The Nature of Language

The nature of language can be examined in terms of a cluster of three general concepts: (1) language is learned behavior developed from a biogenetic potential in a cultural context; (2) the community produces language, which continually changes and varies to meet the community's changing and differing needs; (3) language is a system of conventional oral symbols.

The first general concept includes information about how people acquire and develop their language and the effects on this process of the cultural context in which language is learned. Human beings have the capacity for producing all sounds of all languages. Through imitation leading to the formation of habits, the sounds of a particular language are differentiated from the range of available sounds. The process continues as through imitation and inference, human beings discover and use rules governing the meaningful combinations of sound and meaning units. As language is acquired, humans develop an inventory of conventional word/referent relationships, which vary with the linguistic, temporal, and situational contexts. During language acquisition, non-verbal symbol systems which interact with language are also acquired. Behavioral dispositions, the product of habitual usage of sound, meaning, and ordering features based on the specific contexts in which speech develops, and of values and preferences based on these habits, strongly influence the individual's habitual behavior.

The second general concept in the cluster, dealing with the communal nature of language, subsumes a large number of concepts in language history and language variation. For both the community of groups using mutually intelligible dialects and the dialect group itself, language changes through time in response to changing environment. This change begins with the linguistic activity of an individual, and takes place in all aspects of language, phonological, morphological, syntactic, semantic, and orthographic. Language changes through time in a variety of ways, in response to a variety of kinds of influence. Kinds of semantic change range from generalization and specialization to social degradation and elevation; changes in other linguistic features also take many forms. Change may be stimulated by a great variety of factors, among which are the social influences of external linguistic groups, coinages, analogic creation, and shortenings.

Again for both the community of groups and the dialect group, language varies at any given time in response to the variety of contexts in which it is being used. It varies in usage - - the choice made of potential alternatives of pronunciation, words, syntax, and orthography - - and this variation is not grammatical, but rather dependent upon geographical location, the age, sex, education, and social level of the speaker, the relative formality and type of occasion, whether spoken or written discourse is being used, and other factors. Individuals may control several dialects, or sets of usages which normally occur contiguously, and which they use is determined by the appropriateness of the dialect to the context.

The systematic, symbolic, and conventional aspects of the nature of language are the primary features of the third general concept. Language is seen as a system of sub-systems of sound units, meaning units, and features of arrangement. The conventionality and arbitrariness of language is found in all its systems and units, while at the same time those systems and units are obligatory within the usage range of an individual in a given linguistic context if he wishes to communicate successfully. The range of usage alternatives a person has available, and the contextual appropriateness of the choices made, help determine the relative effectiveness of his communication. In turn, the availability of usage alternatives depends on experience and education.

The symbolic nature of language enables man to use word/referent relationships independently of spatial and temporal limitations, or in other words, engage in symbolic action. Linguistic symbolization illuminates the relationship between speech and writing; speech is seen as the primary referential system and writing as a secondary system which refers to the first.

The Uses of Language

The second half of the definition offered above, that language is used for the conduct of relatively precise patterns of human interaction, forms a cluster of concepts which can be examined in terms of four general statements: (1) language is used by human beings to give information to or receive information from other human beings; (2) language is used by human beings to attempt to influence the belief and action of other human beings; (3) language is used to express or re-create for people the essential nature of a human experience; (4) language is used by individuals and groups as a means of defining and developing self perceptions and perceptions of and relationships to others.

The first of these dealing with the informative use of language, is superordinate to concepts concerned with the kind of language used, the forms this discourse takes, and determinants of success in this use. Informative interaction uses language to describe events and processes existing or thought to exist in the personal, cultural, and physical environments. It is the language of report. This interaction can take the forms of argument and inquiry as well as that of statement, occurs in both written and spoken discourse. The degree and nature of this interaction depends on the extent to which participants share the system, units, and word/referent relationships of the language being used. In the informative use of language, denotative dimensions of words must be shared, and a conscious attempt to ignore connotative meanings should be made. Informative uses of language are characterized by attempts to control the range of denotations associated with the terms used.

Language in its persuasive use, the subject of the second statement above, subsumes concepts of the kind of language used in persuasion, the forms of discourse used, and some determinants of success in persuasion. Persuasion uses language to prescribe events in the personal, cultural, and physical environments which are thought desirable by the persuader. In contrast to the informative use of language, persuasion uses language which is controversial or editorial. Persuasive interaction can and does take the forms of statement and inquiry as well as that of argument. The degree and nature of persuasive interaction depend on the extent to which the participants share the system, units, and word/referent relationships being used, as in the language of report, but here both connotative and denotative dimensions of those relationships must be shared if success is to be had by the persuader. Those engaged in persuasive interaction attempt to control the ranges of both connotations and denotations. In many cases, the persuader makes a conscious attempt to manipulate connotative and denotative meanings without making it evident.

The third general concept, the use of language as expression, consists of two main parts. First, the expressive use of language consists in part of recreating experience by evoking desired responses in an audience. The communicator attempts to predict and control responses to the language used in such a way that maximal sharing of experience occurs. The degree to which the recreation of experience takes place depends not only on the extent to which the participants share language, but on the ability of the communicator in predicting and controlling responses in the audience. Expressive written discourse most commonly takes forms which do not allow the writer immediate feedback, such as the drama, novel, short story, and poem. A major problem of the writer, then, is to predict response.

Second, the expressive use of language consists, in part, of self-expression. The individual attempts to control his language in such a way that it re-creates experience for himself; a poet creates in his work objective correlatives for himself as well as for an audience. The extent of this recreation depends on the individual's ability to use language to control his own responses. The more competency a person has with language, the better he will be able to control response.

The last of the four statements, that language is used by individuals and groups as a means of defining and developing self-perceptions of and relationships to others, has four major aspects. First, language mediates self-identification. The language people use in catagorizing a person helps to shape that person's self-concepts. Reciprically, the language an individual uses is a product of his self-concepts and perpetuates those self-concepts. The kind of self-concept a person may have rests in part on his ability to comprehend and control his environment, which in turn rests heavily on his competency with language. Second, language mediates group identification. The language used in catagorizing groups helps to determine the membership, structure, and self-images of the group. Similarly, the reaction of people to the language of a group helps to shape the group's self-images. Like that of the individual, the language a group uses is a product of the group's self-images and perpetuates those self-images. Third, language mediates identification of other individuals. An individual's use of language provides evidence by which others judge his intention, ability, personality, and affiliations. Social stereotyping is a constant phenomenon of judgements based on the interpretation of speech; this can be both useful and destructive. Finally, language is used to reduce social tensions, to create social bonds. It is used to establish phatic communion between individuals and within groups. Gossiping, joking relationships, and "weather talk" all usually serve the primary aim of binding participants together by ties of social sentiment. Language is also used to mediate differences and conflicts within and among groups. For example, certain forms of address such as "sir," "Doctor", "my learned opponent," are used in some contexts to minimize tension even when one person is disagreeing with another.

Summary

This conceptual overview, although necessarily compressed and general, should serve to give some idea of the range and direction of the language concepts included in the Minnesota Project English Center materials. The conceptual framework presented here is intended simply to introduce the nature and scope of the concepts in the materials. It is not intended to suggest a sequence for teaching. In agreement with the stated assumptions about how curricular materials are best developed, concepts are not taken up in the order in which they are stated above. Rather, concepts are introduced through reference to the immediate and recent experience of students, and are successively re-introduced in new contexts and expanded as the student progresses. For instance, seventh grade materials introduce concepts related to language as learned behavior by way of student experiences with young children--brothers and sisters or children cared for by seventh grade girls who babysit. At levels above grade seven, the materials suggest that student experiences in learning a second language be drawn upon. To use a different example, students may be introduced to synchronic language variation by reference to their having heard various geographical dialects, or by their consciousness of speaking differently from adults in some contexts, while in other contexts they speak more like adults. Later, expanded variation concepts are treated analytically and from broader perspectives; students may examine specific lexical phonological dialect differences, some reasons for them, and study, for example, the use of English in other countries. Clearly, an alert and sensitive teacher is required to relate the concepts to student experiences, although the materials do include suggestions.

TEACHER TRAINING AND PRELIMINARY EVALUATION OF MATERIALS:

Teacher Training Activities

In addition to the actual development and revision of the materials outlined in the preceding section, the Center has engaged in a variety of related activities.

Teacher training programs are a major facet of the Center's activity. In addition to the summer workshops already discussed under Development, the Center has conducted several other programs to inform and train teachers. During the 1964-1965 school year, teachers from the Hopkins, Minnesota school system (which was using the materials extensively in a formal evaluation program) met two hours a week with Center staff members. These meetings provided discussion of the entire sequence of materials, background information for teaching the materials, opportunity to gather reactions of teachers to the materials.

The Center has also conducted, from 1964 to the present, similar weekly discussions with interested undergraduate and graduate students in English and speech education at the University of Minnesota. Other activity in this area has included a series of informal discussions with interested colleagues of former Center fellows in the Minneapolis schools, many meetings with groups of teachers and administrators, and numerous discussions with individuals who have visited the Center.

Demonstration and Evaluation Centers

Teaching demonstrations of the materials by Center staff have been presented at University High School, the spring 1966 conference of the Minnesota Council of Teachers of English, and with other groups of college and secondary school teachers.

Demonstration and evaluation has been facilitated by a grant from the Upper Midwest Regional Education Laboratory which has led to the establishment of demonstration-evaluation centers at Burnsville, Detroit Lakes, and Hopkins, Minnesota. Two kinds of motives generated the establishment of these three centers. First, the Center and UMREL wished to see the materials used on a wider basis, and to insure that at least a sample of the key persons in curriculum reform, in-service teachers and administrators, had opportunity to use, observe, analyze, and evaluate the new programs at these centers which were in part a result of the use of the Minnesota materials. Second, the Center and UMREL wished to conduct a rather special kind of evaluation of the materials, asking the question, "Will a set of materials such as these help generate local curriculum reform?" This question implies a stance toward curriculum reform which emphasizes adaptation rather than adoption of materials (with thanks to the staff of the Northwestern University Project English Center for this terminology). In other words, the extent to which a set of materials, adapted to a specific pedagogical context, was able to provide a catalyst for beginning the process of curriculum reform was a primary goal of the demonstration-evaluation centers.

Each of the demonstration centers was staffed with people who expressed interest in curriculum reform and the Minnesota materials. In each of the systems, there was administrative support for curriculum reform, backed up by a willingness to expedite the process of teacher involvement.

Clearly, these and other factors exist in many schools. As a practical matter, some selection was necessary, and this included attention to the range of situations which might be represented by the centers. Hopkins is an established suburban school system, deservedly regarded as one of the best of its kind in the state. Burnsville is a relatively new and rapidly expanding school system, anxious to maintain and improve its quality while meeting the demands of increased numbers of students. Detroit Lakes, a smaller community in out-state Minnesota, has problems more nearly representative of those in smaller consolidated school systems: a limited tax base, wide ranges of student ability and aspiration, some difficulties in keeping a teaching staff for long periods of time. The basic idea of these choices, then, was to establish centers in school systems which worked with differing student populations, differing human and material resources, but a common interest in developing English curricula.

Formal evaluation of the materials began during the 1964-65 school year and has continued through 1967-68. This evaluation has involved the development of two kinds of measures, a test of linguistic sophistication and a semantic differential attitude scale. Their development and use as well as other methods of evaluation will be discussed in detail in later materials released by the Center.

Other activities of the Center include the publication and dissemination of the present document and other explanatory materials. Long-range plans include the preparation of explanatory materials specifically directed to specialists in teacher education, as well as explanatory materials for elementary school and college teachers.

SAMPLE MATERIALS:

Annotated List of Minnesota Project English Units

Unit 701 - Introduction to the Study of Language

Introducing the seventh grader to selected fundamental generalizations about language and language study, the unit establishes a groundwork for the definition of language that is used throughout the Minnesota Project English materials.

The unit is intended as an introduction to some basic language study concepts, as well as an introduction to topics which are treated in later units, drawing upon this initial introduction. An understanding of language as a system of learned, conventional oral symbols is the most important objective of the unit.

Other concepts developed in the unit include:

... how language is learned in personal, social, and cultural settings,
... how language resembles other coded systems,
...how human language is distinguished from animal communication,
...elements of the communication process in language,
... elements of the linguistic code as a system,
... the personal and social importance of speech,
... elements of the process of argumentation.

Through a series of readings about Helen Keller's experiences learning to use speech, the student is introduced to some basic characteristics of spoken language by examining Miss Keller's first attempts to produce speech sounds, and these early difficulties also serve to illustrate the personal and social significance of language. Following a brief discussion of some of the basic elements of word-referent relationships , students examine the notion of language as a coded system involving "coding" procedures in both the written and spoken forms. Moving to a more general level of discussion, the student's attention is directed from individual language learning to the question of how and when mankind learned to use language. Some elements of the argumentative process are introduced as students consider several theories of language origin. These discussions then lead into the question of animal communication and its relationships to human language. Finally, the unit concludes with a section on the phonemic, morphemic, and syntactic elements of language.

Unit 702 - Changes in the Meanings of Words

Expanding upon the discussion of meaning in Unit 701, and partially functioning as an introduction to the study of semantics, the unit emphasizes the representational relationships between words and their referents, particularly in terms of changes of meaning and degrees of abstraction. As a specific example of meaning change, the unit treats the processes of generalization and specialization. In a number of later units in other grades, other types of meaning change will be studied, drawing upon the introduction from this unit.

Concepts developed in this unit include:

... the fact that language, produced by the community, continually and inevitably changes and varies to meet the community's changing and differing needs.

... that language, in part, is an inventory of word-referent relationships which can be utilized at widely varying levels of abstraction.

... the process of categorization humans use in the process of meaning.

... the relationships between subordination and superordination in terms of language categories.

Of considerable importance to this unit is the student's understanding that changes and variations in meaning, at any given point in time or over a longer period of time, are natural human responses to the changes and variations in the community's demands and needs. The ability of a student to simply verbalize the notion of specialization and generalization, for instance, is not the purpose of the unit. However, by examining this process, as well as the process of change through levels of abstraction, the unit intends to broaden the student's understanding of the phenomenon of change and the social influences that produce change in language.

The concept of levels of abstraction is introduced, through analogy,by the examination of maps showing varying degrees of detail and scale. In a series of classroom activities, students apply the process of selecting details at differing levels, based on the purpose of the speaker or writer. Abstraction is related to categorization and outlining through a subsequent series of activities, among them a classroom game in which students present words and ask opponents to present another word which is either subordinate or superordinate to it. The processes of generalization and specialization are studied as students read the short story, "The Most Dangerous Game," keying on the uses of the "hunt" and "animal" in the story.

Unit 703 - The People Who Study Language

The major purpose of this unit is to expand the student's view of language by studying some of the various disciplines within the general category of language study. The purposes and methods of such disciplines as anthropology, psychology, linguistics, psycholinguistics, and rhetoric are examined with respect to their common interests in language. The centrality of language to human activities is reinforced by the student's understanding of the commonalities between seemingly diverse disciplines as he examines their interests in language.

Most of the language concepts developed in the six-year sequence could be listed as applicable to this unit, as almost any later unit could be related back to the possible discussions in this unit. One of the central purposes of the unit is to introduce to the student the breadth of language study included in the six-year curriculum he is now beginning. The teacher would have an extremely broad range of possible topics to emphasize during this unit, and certain choices undoubtedly must be made if time is limited.

To maintain the interest of the seventh grader, most of the material in the unit is developed through a series of hypothetical letters from a Peace Corps volunteer who has been assigned to a country with a language and culture widely different from his own. As he experiences problems in learning the new language, he requests advice from his uncle, who relays back information from people in the disciplines listed above. This device provides flexibility, as the letters can be revised or new letters can be written by the teacher to introduce other aspects of language and culture or to emphasize certain aspects for more detailed study.

Unit 704 - Introduction to Transformational Grammar

Unit 704 tries to establish the simplest phrase-structure operations and notation techniques fundamental to the understanding of a generative-transformational description of grammatical relationships in English sentences. The most important emphasis in this unit is on the understanding of binary structure, using treebranch diagrams to represent structural, semantic, and phonological contrasts. All examples used in this unit are extremely simple relationships, with more concern for the procedures for representing them than for the mastery of where this is all leading to. Once these fundamentals are understood, students construct certain lexical and structural items for a simplified infant language and apply the rules they have learned to generate admissable "sentences" from this limited vocabulary of semantic and phonological items.

Unit 705 - Syntactic Relationships

Unit 705 is a follow-up to Unit 704. It is an attempt to present the notion of syntactic relationships as flowing from the binary subject-verb relationship in the English sentence. The classroom procedure, based on computer-type programming, teaches classification of grammatical relationships through card-sorting techniques. In a limited way, working from a small corpus of carefully chosen sentences, the sorting establishes the primary syntactic relationships (predicate nominative, post-verbal modification, and direct object) and experimentally continues to teach a simple system of notation.

Unit 801 - Our System of Spelling

This unit does not attempt to solve the problems of spelling inconsistencies in the English language, but it does try to explain some of the influences upon the system over an extended period of time.

Some of the more important concepts in the unit include:

... the notion that the English spelling system often fails to represent actual speech sounds.

. . . the historical bases of our spelling conventions.
. . . the irregularities of spelling as results of dialect changes, borrowings from other languages, faulty assumptions about the nature of language.
. . . relationships between phonemes and graphemes.
. . . the feasibility of spelling reforms.

After surveying a number of historical influences on spelling, stressing the influences of Middle English on Modern English, students are introduced to the concepts of the phoneme and the grapheme. Using this understanding to see what spelling might be like if the written language were to accurately represent the spoken, students discuss several attempts to reform the spelling system, with primary emphasis on the feasibility of such reforms in the future. The general conclusion attempted is that reforms which would accurately match graphemes and phonemes are highly unlikely.

Unit 802 - Language Varies With Approach

Within varying contexts of language use, the unit attempts to increase the student's sensitivity to the rather complex interrelationships between spoken and written language. An attempt is made to develop the student's awareness to variations in language that are relevant to his roles as speaker, listener, writer, and reader. Emphasis is placed on the identifiable and inherent similarities and differences between written and spoken language, within the situational dimensions of formal-informal, standard-nonstandard, time, place, and purpose. Within a descriptive framework which provides an objective examination of situations, media, and usage, the rhetorical notion of appropriateness is heavily stressed.

Concepts:

. . . Speech is the primary form of language; writing is a secondary form.
. . . In addition to the words in speech, gestures, intonation, stress, etc. can be used to provide the listener with additional clues to meaning.
. . . Our system of writing does not provide accurate methods for easily communicating the gestures, intonation, and stress that accompany normal speech.
. . . The spoken situation provides the capability of immediate forms of feedback from the audience to the speaker.
. . . Until modern sound recording equipment was developed, the spoken language was far less permanent than written language.
. . . The variations of usage cannot easily be placed in discrete classes, but can be regarded as a continuum of overlapping conventions.

Following an introduction which reviews some of the seventh grade material on the nature of language, the unit traces some of the inherent and conventional characteristics of speech and writing, comparing the two media in terms of the communication model. Short passages describing dawn from Huck Finn, Tom Sawyer, and Life on the Mississippi provide interesting contrasts, demonstrating a rather wide degree of success in representing speech in written form. In these and other readings, the rhetorical principle of appropriateness receives heavy emphasis. Students are asked to examine the various aspects of the situation as guides to usage for effective speaking and writing.

Unit 803 - Structures of Time, Mode, Manner and Causality

Unit 803 is an approach to the specifically generative aspects of the new grammar begun in 704 and 705. Using the concepts of binary structure and the notation and diagrams already introduced, the procedure moves from a study of the auxiliary system and its effects on sentence time, mood, and voice through a series of worksheets to a theoretical consideration of adverb classification, the generation of simple adverb clauses, and the transformations that form participles, gerunds, and infinitives. The main purpose of the unit is to show the students the essentially dynamic nature of syntax and some of the many varieties of paraphrasing, in the hope that their understanding of style will be matured through their study of grammar.

Unit 804 - Structures of Specification, Place, and Number

Unit 804 continues to develop the notions of generative grammar of Unit 803. For all practical purposes, the two units might even be offered as one. Nevertheless, the systematization of the material that is being taught now begins to take on proportions that seem to indicate some change in approach is necessary. In this unit, therefore, the concentration is more on sentence-writing than on the symbolic representation of grammatical rules, which should, of course, still be used in presentation and explanatory periods, but which need not be drilled beyond the point of recognition and/or working understanding. Grammatic relationships taken up are: the use of the article; the other determiners; application of the knowledge of the article to problems in pluralization, restrictive and nonrestrictive modification, and agreement; and application of transformational paraphrasing to the formation of pre-nominal modifiers, relative clauses, and conjunctive structures.

Unit 805 - The Dictionary: Describer or Prescriber?

The primary concerns of the unit are the purposes and methods of the lexicographer, and the attempt is to give the ninth grader a reasonable understanding of the nature of dictionaries, the information available in different dictionaries, the purposes for which dictionaries have been written, and the limitations of dictionaries. Within this framework, students are asked to examine several contemporary dictionaries, noting any differences in methodology, apparent or stated function, and especially the assumptions about the nature of language. The intent is that the student becomes aware of the weaknesses in viewing any single dictionary as the permanent source of all truths regarding language as he sees the rather substantial differences in the treatment of selected items in dictionaries at this time and from earlier times.

It should be noted that the nature and uses of dictionaries are not limited to this individual unit in the sequence. In several earlier units, as well as the units later in the sequence, dictionaries are used and studied extensively.

Unit 901 - Language Varies With Backgrounds and Interests

The two primary purposes of this unit are to increase the student's awareness of the ways in which language varies with the differing backgrounds and interests of those who use language, and to develop the student's abilities to adapt his own language behavior to more effectively meet the demands of a variety of communication situations. As in Unit 802, the concept of appropriateness is stressed. In order to appropriately suit his language to changing situations, the student must be aware of the relationships between his own background and interests and those of his listener or reader. Coinciding with such an awareness, of course, is the understanding that other people make adaptations of language for persuasive purposes when the student is the listener or reader, and an understanding of the adaptation can be important to the student as a rational listener.

Concepts:

. . . Language varies according to age, sex, educational background, occupation, and avocational interests.
. . . Such variations are sometimes necessities, since different groups need more precise categories than other.
. . . Variations can be used for social purposes, to identify "members" of a group and keep outsiders away.

Selected readings in fiction are used to illustrate some of the differences based on age, sex, and education. In the discussion of occupation and avocation, students hear tape recordings of a livestock market report, a professional football game, and an orbital space flight. Final activities include the technical demonstration speech and literature selections in which characterization is based upon the language used by the character.

Unit 902 - Changes in the Meanings of Words: II

This unit is concerned with the study of how and why changes occur in the meanings of words. It is hoped that the unit will develop understandings of several specific ways in which the meanings of words change; of the interpersonal relationships and the social values which cause such change; and of some general concepts related to change in language which have wider application outside the content of this unit. Additional value may lie in peripheral understandings. For example, the student may gain a greater tolerance for and understanding of the different meanings of words which he encounters in earlier works of literature; or develop an awareness of the richness of the vocabulary of his language.

In terms of specific subject matter, this unit deals with the systematic description of various types of lexical change, ignoring the systematic treatment of the history of these changes. Such treatments can be found in units 905 and 1201. The major focus here is on developing a taxonomy for describing various types of lexical change. The unit deals with degradation, elevation, radiation, euphemism, hyperbole and popular (folk) etymology. Abstraction, generalization, and specialization were treated earlier, in Unit 702.

Unit 903 - Approaches to Grammar

The intent of this unit, central to the Minnesota Project English materials in general, is to demonstrate to the student that there are many perspectives from which to study language and that it is dangerous to assume that any one of those perspectives is inherently correct for all situations and all times. More specifically, the unit traces some of the major developments in the study of grammar from ancient Greece to the present, illustrating some of the most significant differences in the interests, assumptions, and methodologies of grammarians. It is hoped that the student will avoid simply passing judgment on the merits of any one approach to grammar by gaining at least some understanding of the cultural influences upon the various grammars.

The unit begins with the somewhat descriptive Greek grammar as explained by Thrax. Switching to the field of astronomy, students are shown one of Ptolemy's diagrams of the planets--an impressive attempt at description if one overlooks the fact that Ptolemy has assumed the Earth as the center of the solar system. Students then examine an example of medieval grammar and compare the attempt to identify language universals with similar attempts in other fields during that time. Moving to the 18th century, students find a somewhat similar interest, as the 18th century grammarian, following the predispositions of his time, prescribes grammatical rules that are based on Greek and Latin writings. As the student examines the 19th century penchant for taxonomy in the sciences, as well as the interests in comparative study of cultures, he sees the descriptive grammarian following these influences with the use of structural linguistics. Finally, the current emphasis in physical science on discovering tenable rules which allow prediction is illustrated and related to the attempts of the transformationalist.

While the range of topics is broad, the intent is not for the student to learn specific details about each approach to grammar. The unit is successful, rather, if the student realizes that the approaches vary in response to the contexts in which they have been used.

Unit 904 - Structures of Emphasis in the Paragraph

The paragraph revision unit is the culminating unit of the transformational grammar series. If the students have grasped the dynamics of structure shifts, they ought to be able to move to some consideration of authorial intention and to utilize the transformational properties of syntax so as to further their grasp of style and purpose in the paragraph. The unit is essentially a resource unit, consisting of a series of paragraphs from published works, analyses of the syntactic emphases of each, and then exercises which direct the student to work toward shifting the structural emphasis; for example, from emphasis on time to emphasis on place, person, action, etc.

Unit 905 - A Historical Study of the English Lexicon

This unit is intended to introduce students to the historical study of language. As an introductory unit the crucial concern is the historical method rather than specific historical data. For this reason there is no attempt to develop the unit chronologically, nor is there any attempt to give the student the exact chronology of the history of the English language. Instead this unit attempts to give students an understanding of the several kinds of linguistic phenomena which, when viewed historically, help to explain the ways in which our language has developed. In other words, instead of treating the history of the English language in terms of a series of somewhat arbitrary historical periods, this unit attempts to see growth and change in language in relation to the history of the people speaking that language.

In addition, this unit limits itself to a consideration of the lexicon of our language. The major reason for avoiding the consideration of syntax, morphology, and phonology is that ninth graders may not be ready to treat these matters profitably in the context of historical study. These areas will be covered in later units, especially Unit 1201.

Since the intent is not to provide the historical survey, the unit begins with consideration of current changes in the English lexicon, primarily those changes which have occured as a result of technological advances in recent years. After examining these current changes, students begin looking back on earlier developments, particularly in terms of the relationships between language and the historical contexts. Of key importance, as in several other units, is the understanding that language change is a natural and inevitable result of social and cultural change.

Unit 1001 - The Nature of Meaning in Language

This unit's general purpose is to introduce the student to some of the complexities in the study of linguistic meaning by examining the relationships between linguistic symbols, their referents, the situation, and the people who interpret them. The unit attempts to give the student insight into the processes of meaning, to acquaint him with terms that are applicable to the analysis of meaning in practical and artistic language, and to familiarize him with methods of applying his understanding of meaning processes in his own speaking and writing. The use of several dimensions will point out the complexities of meaning, and it is quite likely that students will find these somewhat overwhelming. On the other hand, the terms to provide operational bases from which students can attempt to study the complexities of meaning.

Topics treated in this unit include:

. . . the relationships between signs, symbols, and referents.
. . . the concept of extra-linguistic meaning.
. . .the primacy of spoken language.
. . .referential and expressive meaning.
. . . the communication model.
. . . the relevance of communication study to the study of meaning in language.

The unit begins with the reading of Ray Bradbury's short story, "The Kilimanjaro Machine." While the reference to the life and writing of Ernest Hemingway is patently obvious to those who have read Hemingway's works, the story is almost hopelessly obscure to the tenth grader. As certain clues about Hemingway (the referent of the story) are provided through class discussion, however, the story takes on meaning. This discussion then leads into the study of the relationships between words and referents, using Susanne Langer's analysis of signs, symbols, and referents as the major starting point. Readings from Paul Wendt and Vance Packard illustrate some of the extra-linguistic symbol processes, and selections by Charlton Laird and S. I. Hayakawa discuss aspects of linguistic meaning. The conclusion of the unit involves the application of the symbolization process to the process of communication.

Unit 1002 - The Modes and Functions of Discourse

While this unit is relatively brief, it serves as an important introduction to several units in the tenth, eleventh, and twelfth grades. It is not intended that this unit provide a comprehensive and conclusive survey of discourse. The essential concern, rather, is the asking of basic and tentative questions about the ways in which language is adapted to its purposes by the rhetorically sensitive writer or speaker and the ways in which language is evaluated and interpreted by the sensitive reader or listener. Such questions will be prompted by a general examination of discourse reflecting a wide range of purposes. Looking for rather general similarities and differences. While a major objective must certainly be the application of concepts, attitudes, and skills to each student's individual situation, this will not be reacher in the course of this unit. This application might be started here, but there are later units in 10th, 11th, and 12th grades which deal more specifically with the modes and functions of discourses:

Unit 1003 - The Language of Exposition
Unit 1102 - Persuasion

Unit 1103 - The Nature and Evaluation of Argument
Unit 1202 - The Language of Evocation
Unit 1203 - Social and Psychological Implications of Language
Unit 1204 - Evaluating Persuasive Discourse

In this and the above units, a spirit of tentativeness and inquiry on the part of students and teachers alike is most important. In the light of this emphasis, the unit places very little value on prescribing technical terminology. Rather, the students are encouraged to develop terminology and models through inductive approach, and the teacher can provide the more technical terms later in the units. This tentativeness and the awareness that a theory of discourse must be carefully qualified may depend heavily upon the attitude of the teacher. Students should not be given the impression that there is one way of talking about discourse, or that there is one set of terms that encompasses all they might need to know in this area. Students should understand that we are often discussing these matters on a rather high level of abstraction, and that scholars have not yet been able to reach consensus on either the terminology or the subject matter in general. While the unit does include an attempt to construct a theoretical model of the functions of discourse, it should be viewed as a model - not as a prescribed formula.

Unit 1003 - The Language of Exposition

Drawing upon material from Unit 1001 - The Nature of Meaning in Language, and Unit 1002 - The Modes and Functions of Discourse, this unit attempts to focus more specifically on the characteristics of expository language. As the term is used throughout this and other units, "exposition" refers to language outside the arena of overt controversy, as compared to more obviously suggestive discourse in some areas of persuasion and evocation. The earlier units have provided a very general overview of the functions of language and the characteristics of language used for the various purposes, and the spirit of tentativeness in attaching labels to the various forms is continued in this unit.

While the two preceding units are rather theoretical, this unit is intended to deal more specifically with the writing and speaking of students. Considerable flexibility for student writing and speaking activities is encouraged, and the unit could be divided into sections and related to the year-long writing and speaking program for the tenth grade.

The two central divisions of the unit are the study of the organization of expository discourse and the study of the modes of exposition, including description, illustration, comparison and contrast, classification, causality, and definition, as these bear on the production and analysis of "report" language.

Unit 1005 - Grammatical Formations

As earlier indicated, the seventh, eighth, and ninth grade units on grammar are based upon a transformational approach. This unit, however, draws most of its materials from structural linguistics. It is the aim of the Minnesota Project English "language-centered" curriculum that the student learn to view language from more than one point of view, observing that there are several grammars, rather than only one, and that there is still disagreement as to which best suits the needs of language description. If students have studied Unit 903 - Approaches to Grammar, they should have a good background for the switch to a structurally based approach.

The unit is primarily concerned with the explanation of the concept of the phoneme. The first section, treating the suprasegmental phoneme, discusses pitch, stress, and juncture. The second section on segmental phonemes develops understanding of voiceless consonants, sound formation and grammatical signals, and contractions.

Unit 1006 - Learning Our Language

This unit is intended as an introduction to some of the primary aspects of language learning. As in other materials developed in the Minnesota Project English Center, the study of language as language provides the underlying framework to which the other skills, attitudes and concepts in the English curriculum are related. By studying the major ways in which the individual learns to use his language, it is hoped that the student will be better able to understand important aspects of language in general. Moreover, since language learning is so central to the general process of learning, the student should become somewhat more familiar with an important part of his school experience.

Since this unit includes material that is likely to be fairly difficult for the high school sophomore, it is recommended that units providing relevant background material be taught before this one. In particular, Unit 1001 - The Nature of Meaning in Language, and Unit 1005 - Grammatical Formations, should be taught before this unit. It is likely, then that this unit will be taught toward the end of the school year.

The primary source for this unit is *Words and Things* by Roger Brown. It is highly recommended that the teacher read this book before attempting to teach the unit. While the unit can be taught without this background, the teacher will find the book most helpful, particularly the introduction and chapters I, III, IV, and VII. Some of the same material is available in a paperbound book, *A Study of Thinking*, by Bruner, Goodnow, and Austin. This book includes an appendix on language written by Roger Brown.

Within the unit, the language learning process will be examined on three levels: physical, psychological and cultural. The physical aspects are quite technical, and the treatment in the unit is brief. The teacher might wish to provide additional material on phonetics and/or phonemics; in this case, the early chapters of *Words and Things* will be helpful for examples. The psychological aspects of language learning are given the heaviest emphasis. The process of categorization is the central method of analysis in this section. The cultural basis of language, the last part of the unit, will probably be the most demanding for both the teacher and the students. While there are a great many interesting and important questions related to linguistic relativity, this material has the least conclusive research, so the answers to the questions will be most difficult to provide. Perhaps the value is in the asking of these questions.

Unit 1007 - Dialects and Social Stereotyping

This unit examines the relationships between dialects and language, providing students with an understanding of why dialects exist. Several types of dialects are covered in the unit, ranging from the regional variations to variations based on age and sex. Included in the unit are the dialects based on educational backgrounds, ethnic or national origin, and occupational dialects. More important than simply learning examples of dialect variations is the understanding of why such variations exist and what implications these variations have for social situations.

One of the primary concepts developed in this unit is that there is no universally "correct" or "proper" form of the English language which applies to any and all cases in which the language is used. Students learn that their own speech *is not the correct form for all speakers of English, with all other forms being quaint* or humerous or degraded variations; rather, the unit aims at the understanding that the student's own language changes considerably with differing situations and should be regarded as one or more of the dialects of the English language.

The unit develops the notion that the individual is often judged by his speech, but it also stresses that the criteria for such judgments will differ widely in changing situations. That speech reflects something about the characteristic of the speaker is handled in two ways. Students can readily see that language is useful for such purposes, but it is also shown that the use of language for value judgments also is capable of considerable destruction. The student is urged to use the analysis of language behavior for useful hypotheses rather than ignorant conclusions. Students are shown, for instance, how useful dialects can be in characterization in fiction, as well as the harm that can come from dialect stereotyping in social situations.

Unit 1101-A - Language Varies by Place: American English

This unit is intended to provide background materials on regional variations of speech within the United States, the causes for the differences and similarities, the work of the dialect geographers, and the study of dialect in American literature. The unit attempts to provide both a framework of important factual information about the American regional dialects and an understanding that the student's own speech is part of a dialect of English, rather than the "correct" form of the English language for all speakers of the language.

Throughout the unit, an extensive collection of historical and current data is used to supplement lectures, discussions, and student activities. Classroom activities are also supplemented by a series of projection transparencies, tape recordings, and phonograph recordings. The unit begins with a section on the historical basis for American dialects, tracing some of the important origins, influences, and migrations. The next section deals with current aspects of the major dialect areas in the United States. The following section treats migrations and influences of other languages in more detail. The last two sections are devoted to the work of the dialect geographer and the study of dialects in literature.

Unit 1101-B - Language Varies by Place: English in Other Countries

Intended as a companion unit to Unit 1101-A, which deals only with American English, this unit attempts to broaden the student's understanding of the dialect-language relationship by illustrating English dialects in other countries. Throughout the unit, students compare lexical, phonological, morphological, and syntactic characteristics of the various dialects, attempting also to relate important data about the cultures to the dialects.

The introductory section surveys the spread of the English language. Moving to more specific topics, the second section deals with countries in which English is the primary language. Included are Britain, Canada, New Zealand, and Australia. Students then examine countries in which English is secondary to the native languages, as in India. The unit then moves to the consideration of Pidgin and Creolized languages, showing how English can be combined with other languages. The next section then examines some of the influences of English on other languages, notably French and German. Finally, the last section poses the question of the future of the English language in other countries.

Again, one of the primary intentions of the unit is to avoid the conclusions that there is any single, "correct" version of the English language, concluding instead that these versions are all dialects of the language.

Unit 1102 - The Language of Persuasion

The purpose of this unit is to acquaint the eleventh grade student with one of the basic functions of discourse; persuasion. Persuasion may be defined tentatively as an attempt to secure a controlled response in action or belief through language. In Western civilization there are basically two methods of achieving change; force and persuasion. Central to a democratic society is the rejection of force; we tend to distinguish the totalitarian society from the free society in part by the way in which change is affected. In the closed society, there is often only one system of beliefs; in the open society, characteristically, one finds a set of competing persuasions. Insofar as a society allows choice, it enables persuasions to compete in a free market place of ideas. A democracy holds that the best persuasion will ultimately be chosen.

Our society has made a commitment to persuasion as opposed to force; and persuasion is a vital part of the complex society in which we live. The success of government, business, social and personal relationships depends to a great extent on the understanding of the structure of persuasion.

Most speaking and most writing are, to a certain degree at least, persuasive. The short story must be convincing, its characters believable, and its plot solution plausible and satisfying. Poetry, too, is persuasive. The reader must gain a new insight of real importance. Editorials, partisan speeches, advertisements, radio and television commercials, magazine articles, and books are designed to set forth a certain point of view and to change thought or behavior accordingly.

This MPEC unit on persuasion is introduced in the eleventh grade to give students an opportunity to acquire a knowledge of persuasive discourse, an introduction to the means of evaluation of it, and practice in the use of persuasive speaking and writing. It is assumed that the students have had an introduction to the modes or functions of discourse in the tenth grade. (See MPEC units for Grade Ten) However, the unit on persuasion is so planned and constructed that it may be presented in the eleventh grade without the tenth grade introductory unit.

The unit is organized around three headings suggested by Aristotle as categories for analysis of persuasion. We consider first, the *writer or speaker as persuader*. The second part of the unit is concerned with *writing and speaking as tools of persuasion*; we include materials on semantics, the psychological methods of language manipulation, and the logical methods of language manipulation. In the third part, we consider the *audience and the contest of persuasion*, including the historical, sociological and psychological contexts.

This unit on persuasion may be taught concurrently with literature which illustrates the uses of persuasion. The unit may be used to introduce literary works or it may be used to suggest different approaches to literary words previously presented. The literary selections will be taken from American writings which constitute the literature usually presented in the eleventh grade. Numerous references to materials are made throughout the unit, and the appendices contain many materials which the teacher may find helpful for the unit.

Unit 1103 - The Nature and Evaluation of Argument

The four primary purposes of this unit, the fourth unit in a series of senior high materials on discourse, are:

. . . to provide the student with a useful framework for the construction and evaluation of practical argument.
. . . to develop the student's proficiency in the use of logical, reasoned discourse, founded on acceptable bases of argumentation.
. . . to develop student awareness of the types of argument, as opposed to highly emotional or, of course, coercive measures.
. . . to promote the student's sense of responsibility for meeting ethical standards that are vital to free speech and inquiry.

The first section of the unit deals with Toulmin model for the structure of argument. Because Toulmin's model is descriptive and flexible enough to adequately account for arguments familiar to the student, it is hoped that students will be better able to apply it to practical arguments than students attempting to apply deductive logic.

Following this, there is a brief section on the modes of proof, discussing authoritative, substantive, and motivational proof. As authoritative and motivational proofs are discussed in Unit 1102, this unit then focuses on substantive proof, examining lines of argument, varieties of substantive proof, and the evaluation of substantive proof. A final section deals with the ethics of argument.

To develop these topics the unit relies heavily on a wide variety of readings and accompanying student activities. After the analysis of the arguments in the readings, students are asked to develop their own speeches or essays using the various approaches. The unit culminates in a classroom mock trial in which the evidence and testimony is provided, but not the deliberations or conclusions. Selected students write summations, and the remainder of the class evaluates on the basis of the earlier content of the unit.

Unit 1104 - An Outline of Grammatical Elements

This unit is intended as a survey of the most important grammatical elements in English, moving from the smallest and simplest to the longer and more complex. The unit attempts a synthesis of grammatical principles students have learned in previous grammar units in grade seven through ten.

The unit's organization is as follows:

. . . Rules, principles, or criteria for arranging meaningful elements in words, phrases, and sentences.
. . . Definition and survey of meaningful elements.

. . . Identification of four parts of speech.
. . Five basic sentence patterns.
. . . Expanding basic sentence patterns by transformation.
. . . Syntactic structures of predication, complementation, modification, and coordination.

Unit 1201 - A Historical Study of English Phonology, Morphology and Syntax

Unit 1201 is intended to be a historical study of the phonology, morphology and syntax of the English language. The unit concerns itself with both the methods and purpose of the historical study but it does not attempt to provide a chronological survey of the history of English. Such a survey seems inappropriate since the major concern of the unit is not with specific historical data but with the growth and change that characterizes a living language.

In terms of the specific subject matter treated in this unit two additional points should be made. A unit treating the history of English phonology, morphology, and syntax must of necessity, assume some knowledge of phonology, morphology, and syntax on the part of the students. If students do not have such knowledge a consideration of lexical change would probably prove more profitable. Finally, this unit is a limited overview of several complex areas of historical linguistics. While the treatment is in no way definitive, it is hoped that it is representative of the methods used and the conclusions reached by the study of these branches of language history.

Unit 1202 - The Language of Evocation

The purposes of this unit are three: first, the unit attempts to bring students to an understanding of the ways in which language can be used to evoke an experience; second, the unit attempts to provide the student with certain concepts and techniques which will enrich his understandings of the evocative language he encounters in reading literature; finally, the unit attempts to demonstrate that evocation is not limited to either language or literature.

The unit begins with the use of a tape recording of the Kennedy funeral cortege, as described by a radio announcer at the scene. While this tape recording is extremely difficult for students and teachers to discuss objectively, the relationships between language and context that produce emotional reaction are dramatically and effectively demonstrated. Following this, students read a number of poems dealing with Kennedy and the assassination, and the evocative elements of ritual and legend are illustrated..

The second section of the unit deals more specifically with the purposes of evocation and the relationships between evocation and motive. The units draw heavily upon Kenneth Burke's concept of "dramatism" for the material in this section.

The third section discusses the role of evocation in language, reviewing material on the modes and functions of discourse, discussing the human characteristics that contribute to emotional responses, and, finally, explaining the language behaviors which can produce the evocative response.

The last section of the unit is a series of study questions to accompany the reading of Golding's Lord of the Flies. Almost any of the concepts and techniques included in the unit can be applied profitably to the study of this novel, and there are many other literary works which, at the discretion of the teacher, might also be used. Throughout the unit, literary selections are used extensively, but the teacher is urged to choose other selections if they would be better suited to the literature program in the particular situation.

Unit 1203 - The Social and Psychological Implications of Language

This unit could be used for either of two basic purposes, depending upon the background of the students being taught. For students who have previously been taught MPEC units, this one could serve as a summary and synthesis of earlier units which introduced concepts contained here. For students who have not yet met the concepts included, the unit could serve as an introduction to some of the social and psychological dimensions of language. The teacher will want to preview the unit, especially the outline following this statement, and decide on the most profitable way of using the unit.

The unit attempts to treat the social and psychological importance of language in systematic fashion. The assumption is made that twelfth grade students in their individual and classroom experience, have encountered instances of linguistic stereotyping, in-group language, or inferences of values drawn from language usage. The aim of this unit is to help students analyze these experiences as objectively as possible.

A spirit of tentativeness on the part of students and teacher is necessary in this unit. Much of the information and many of the activities of the unit are designed to raise questions about how social values are developed and transmitted through language. Teachers should not allow students to conclude that the final word on social and psychological problems is contained in this unit. Rather, students should be encouraged to recognize the unit for what it is: a glimpse at the substantial role of language in the social and psychological make-up of man.

Alternative introductions to the unit are provided. The more satisfactory introduction would, of course, be selected by the teacher. The material included in the other introduction will then follow as part of the unit.

Unit 1204 - The Evaluation of Persuasive Discourse

The purpose of this unit is to provide an introduction to the criticism of persuasive discourse. While it is geared primarily to spoken discourse, especially to the speeches of persuaders, this limitation is not meant to suggest that in this unit the teacher and the student should not be concerned with written persuasive discourse. That persuasive discourse is prominent in literature may be indicated by simply reflecting on the works of Jonathan Swift, Aldous Huxley, and George Orwell, to name a few. The student in this unit could profitably explore such persuasive discourse as George Orwell's 1984 or Animal Farm.

This unit is designed especially to serve as a follow-up to and application of the units on Argumentation (1103), Persuasion (1102) and Evocation (1202). The unit is constructed so that the student, if the teacher desires, could do a term project by analyzing the persuasive discourse of a movement. A set of sample questions has been provided along with a speech (MacArthur's Address to the Congress) to which these questions have been applied. Sample student responses have been included in the discussion sections of the unit, but these should be viewed as desired responses rather than expected responses. Student discussion of these questions will probably range far beyond the responses suggested, and the discussion questions should be considered only a starting place for actual class discussion. From the class discussion, the teacher will probably want to draw responses somewhat similar in content to those indicated in parentheses. In others, the teacher may find it necessary to provide the answers suggested.

In the process of class discussion, the teacher may find that students do not fully understand material that has been assumed in this unit. To review that material, the teacher may want to refer to:

Unit 1002 -- The Modes and Functions of Discourse
Unit 1003 -- The Language of Exposition
Unit 1102 -- The Language of Persuasion

Unit 701

INTRODUCTION TO THE STUDY OF LANGUAGE

Grade 7

CAUTIONARY NOTE

These materials are for experimental use by Project English Fellows and their associates who contributed to their development.

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PURPOSES OF THIS UNIT

The basic purpose of this unit is to introduce to seventh graders some basic notions about language and the study of language. An attempt is made to show students how language is learned, how language is a code, how speech is distinguished from systems of animal communication. Some attempt is made to discuss the elements of the communicative process, and the elements of the linguistic code as a system.

The personal and social importance of speech are stressed, as are personal adjustments to linguistic situations. In learning about the various theories of the origin of language, the student learns some of the basic elements of the process of argumentation, including identification of types of evidence.

TO THE TEACHER

Procedures, Sample Questions for Discussions, Sample Introductions, and Sample Summaries are supplied for your guidance. It is assumed that you will adapt these to your own classes and students. Likely answers to discussion questions are indicated in parenthesis.

Special attention should be paid to the places in the unit in which the word "ATTENTION" is used. This serves to call to your attention specific kinds of generalizations which might be drawn at that point.

OUTLINE OF THE UNIT

Sample Introduction

"The unit we are about to begin deals with language and the way in which we learn language. Although we use language in many of our activities we seldom stop to consider what we are doing with that language. The purpose of this unit is to give you some understanding of how our language operates, and how it works the way it does."

(Teacher may expand indicating some of the kinds of activities to be undertaken in the unit.)

Sample Discussion Questions

1. Does anyone know who Helen Keller was?
2. What was "different" about Helen Keller?
3. Why was she famous? What did she do?

Excerpt #1 "The Most Important Day" from THE STORY OF MY LIFE By Helen Keller

Read to the class Excerpt #1. If possible, have students follow along with copies of their own. Ask students to watch for statements or sections that deal directly with the learning of language.

Procedure after reading Excerpt #1: Discuss

1. Suppose you knew nothing of Helen Keller, her life or her experiences. Where in this excerpt do you first find her revealing her need to "be educated?" Can anyone remember the words she used to describe this feeling?

   (wordless cry of my soul)

2. What was the first language experience that Miss Sullivan introduced to Helen Keller?

   (spelling of "doll")

   Did H. K. know that she was spelling a word when she repeated the letters for "doll?"

   (No; she was merely mimicking)

3. What was the first experience that made H. K. aware of the "mystery of language?"

(association of cold water dashing over hand while word "water" was being spelled out in other hand)

4. We often talk about "language principles" or "facts about language." Can anyone recall the fact about language that H. K. says she learned first?

   (everything had a name; each name gave birth to a new idea.")

5. What were the first words that H. K. learned?

   (mother, father, sister, teacher)

6. Why are these words so easy to teach and to learn?

   (they represent things we all know and understand)

7. What are the first words learned by little children?

   (the same kind of words; words that represent things near at hand)

8. Would it be fair to say that the teacher was teaching H. K. to learn a language the way little children learn it?

   (yes)

9. Miss K. says that she asked few questions at first. Why?

   (did not have a large vocabulary with which to ask any question she might have had)

10. Do little children, when they are first learning the language ask many questions, or do they accept almost any explanation we may give?

    (the latter)

11. When do little children begin asking a lot of "why" questions? When they first learn the language, or when they are about four or five years old and have learned many words.

    (the latter)

12. Why did Miss Keller become so disturbed about her teacher's inability to answer her question, "What is love?"

(she could not understand that this was a word for an idea, not a word for a thing, and therefore not easily explained)

13. What other words can you think of that would be difficult to explain to someone new to the language?

Would the word democracy be hard or easy to explain?

(hard)

Would the words candy or food be hard or easy to explain?

(easy)

How would you go about showing someone who did not speak English the meaning of the word candy?

(point to the object, candy, and say the word, "candy." Because we can point to or see or feel or taste the object the word refers to, we say it is "concrete."

How about these words? Hard or easy to explain?

justice
peace
house
sun
jump
run
happy
joy
shoe
ear
suspect
red

Ask class why words such as "justice" and "peace" are hard to explain. Stress our inability to see, hear, feel, smell or point to the things these words stand for. Introduce the term abstract to apply to such words.)

14. Which would be harder to explain to a blind person?

the word red or the word cat? (red)

the word rough or the word bright? (bright)

Why? (the blind person would not be acquainted with the object or idea)

15. When did Miss Keller's first idea of an abstract idea occur?

(when the teacher tapped her forehead and spelled "think.")

Sample Summary Statement

"Here is a good example of the learner first encountering a language. There are some general statements we can make about this situation that apply to all language situations. For example, we learned to speak our language by imitating, or mimicking others about us, usually our parents and brothers and sisters. Helen Keller did the same thing--she learned by mimicking Miss Sullivan. At first, she admits, she did not know the meanings of the words she mimicked. As little children, we often did the same thing. We used words without knowing what the words meant. We can note, too, that the first words that H. K. learned were the words for the things nearest about her--words for"concrete" things first. Much later we learned the words for "abstract" ideas.

Discuss:

1. Name some words for "concrete" objects"

   (sand, man, Mary, etc.)

2. Name some words standing for abstract ideas. Try to avoid the ones we discussed before.

   loyalty
   fear
   hate, etc.

ATTENTION

Try to make the generalization that "words," in and of themselves are neither more nor less abstract than any other words. All words are the oral or printed symbols that stand for concrete or abstract things.

Procedure

Write the word "word" on the chalkboard.

Write the word "cat" on the chalkboard.

Discuss:

1. Are these words abstract or concrete? Think carefully.

   (they are concrete; word stands for something concrete; cat stands for something concrete.)

   (we can point out each of these things as we say the word that stands for it)

Procedure:

NOTE: Distinguish carefully between the linguistic form and the referent.

Write the word "cool" on the chalkboard.

Write the word "love" on the chalkboard.

Write the word "pretty" on the chalkboard.

Discuss:

1. Are these words themselves abstract or concrete?

   (they are concrete; in and of themselves they are things that can be pointed to)

2. Are the referents (the things or ideas the words stand for) abstract or concrete?

   (the referents are abstract)

Distribute Excerpt #2 and Worksheet #1

Excerpt #2 "What Things Are Called" from THROUGH THE LOOKING GLASS by Lewis Carroll.

"The excerpt I'm passing out now is from Lewis Carroll's book Through the Looking Glass. In the part you'll be reading Alice is having some trouble understanding the Knight who wants to sing a song to her.

The worksheet I'm giving you should help you discover just what sort of trouble Alice is having. First look at the worksheet. Then read the passage, paying special attention to what the Knight says are the differences among the name of the song, what the song is called, and what the song is.

You will probably want to read the passage more than once. Write down your answers for the worksheet as you read through the passage."

In a kind of summary statement, try to establish again the idea that words are not the things for which they stand; all words are concrete; they can be sensed; they can stand for things, however, which may be either abstract or concrete.

ATTENTION

Make clear that the word is not the thing, but that the word stands for the thing. Introduce the term symbol as something that stands for something else. Words are one kind of symbol.

Sample Introduction

"We have been discussing the ways in which Helen Keller learned our language. From the excerpt I read to you, however, you will recall that there was no sound involved. That is, H. K. and Miss Sullivan were using a kind of 'alphabet spelling code.'"

"There are many kinds of codes, and there are likenesses and differences among these, of course."

Discuss: What kinds of codes do you know about?

(Various kinds of codes are supplied here for the teacher's guidance.)

Procedure:

Teacher may wish to list some of these on the chalkboard, adding to the list to elicit new examples. This list is not complete, but merely serves to illustrate the kinds of codes that might be suggested.

1. Visual Codes: (these embody a message in some kind of visual signal)

Hand Signals:

driver signalling direction of turn

soldier signalling others to join in attack or retreat

umpire calling a strike or ball or signalling a player is "out" in a baseball game

trainman signalling conductor or engineer

a catcher signalling the pitcher in a game of baseball

referee signalling a kind of foul in a basketball game

official calling a penalty in a football game

Based on invented alphabets:

semaphore codes:

flags
lights

Based on agreed-upon messages:

traffic lights
railroad crossing flashers
turn signals on automobiles

2. Audible Codes: (these embody or utilize a message in some kind of signal that can be heard)

Morse code (based on invented alphabet)
(Secondary, -- derived from alphabet)

Sounds signalling various kinds of situations:

Meanings perceived here as learned systematically; by observation or teaching

- siren of an emergency vehicle
- siren for civil defense drill
- signal for all clear after drill
- signal for fire drill in school
- whistle used by an official in a game to signal the players to stop
- bells signalling that church is to begin

3. Uses of secret language or cant (regular words with different meanings)

4. Language codes of various kinds

   (it is quite unlikely that this will arise unless the teacher suggests it)

NOTE :

Some students will suggest various kinds of cipher codes; these usually involve substitution of some other symbol for the letters of the alphabet, as follows:

Examples:	#1	#2	#3
A	1	□	/
B	2	△	//
C	3	◡	~~//~~
D	4	⊠	~~///~~
E	5	▲	~~///~~
F	6	▽	~~////~~

Sample Summary

"Here we have listed a number of codes. We will soon see that there are others, far more complicated than the ones we have mentioned so far."

Sample Discussion Questions

Discuss:

1. What do all of these codes have in common?

   (series of identifiable units which carry meaning when put in some agreed-upon order. This is the message.)

Sample Discussion Questions Continued

2. What is needed besides someone to send or encode a message?

   (someone to decode or receive the message. Thus a code involves a sender (encoder)$_1$, message (code)$_2$, receive (decoder)$_3$.

3. What would happen if the receiver did not know what the symbols stood for?

   (he could not decode the message)

4. Could we say that the actual symbols used are less important than the fact that the sender and receiver must agree on what they stand for?

   (yes; the symbols are *conventions*; we could make up any kind, so long as we agreed)

Sample Introduction

"The mention of the various kinds of cipher codes (codes employing substitutes of symbols for letters of the alphabet) brings up an important question. Is language a code? Does it meet the standards we set up for a code? Does it have a series of "units" that carry meaning when put on some agreed-upon order? Does it involve a sender, message, and receiver?

If it does all of these things, then it certainly is a code. Linguists often refer to language as *linguistic code*. That is, they can identify the units, the sender, the message, and the receiver. Often we think of a code as a kind of *secret language* or *secret writing*. Any given language would be this kind of code to a person who did not speak or write or understand that language. This is why some scholars who understand ancient languages no longer used have been called upon to develop codes built upon those languages.

Sample Introduction Continued

But we are talking about a code in a different sense: a system understood by the people who speak a given languag

The language we speak, then, is a code. It employs certain sounds, which we can put together into meaningful ways (words) to carry meanings. When these words are put together into certain patterns, which we call sentences, the code can carry very complex messages. These, then, are the basic elements of a language code.

Discussion

Discuss:

1. If language is a code, what are the letters of our alphabet? Are they a code, too?

   (in a sense, yes; they are a secondary representation of a language code. They supply symbols for sounds, which are units already in operation in the language code, language. The letters are second representations of sounds, the first representation.)

Sample Summary

"Language, then, is one kind of code. Letters of the alphabet which stand for the sounds of our language (although inadequately) are a secondary representation of language code. When we use cipher codes, based on substituting certain symbols for letters, we are really developing a tertiary code, that is, a code built on a code which is built on a code.

There is another representation of our language code, much like the alphabet. This is called the International Phonetic Alphabet. In this secondary code, a symbol is used to represent each sound of the language, the basic code. This secondary code, the IPA, is seldom used outside scholarly circles, but it is well-known to students of language. Using it enables them to make written

Sample Summary Continued

records of the actual pronunciation of various words and phrases.

It should be remembered that the alphabet, as we use it in our writing, is an attempt to use letters to stand for sounds. Any of us who have had trouble in spelling words correctly know that the letter standing for a given sound may vary considerably.

For example: look at the different ways in which one sound can be represented by letters:

Teacher may wish to write these on chalkboard.

sh sound

ship
ocean
machine
special
sugar
schist

sonscience
nauseous
mansion
tissue
mission
mention

"Thus we find ourselves using a variety of symbols to represent the same sound. Using the IPA would result in the use of one symbol for each sound.

In short, the problem is quite simple. We have 26 letters but many more sounds; in fact we use 45 of them when we speak.

We have seen that there are many ways by which we use different letters and combinations of letters for the same sound.

On the other hand, we often use the same letter to stand for different sounds. For example: the beginning letter of sugar and salt is "s"; without some kind of phonetic alphabet, however, the student of language would have difficulty recording the pronunciation. By using the IPA, the phonetician (that is, the man who studies the sounds of speech) can make the following notations to show the difference:

Teacher may wish to write symbols on chalkboard.

/ʃ/ or /š/ for the beginning sound in sugar

/s/ for the beginning sound in salt.

There are many other symbols that the phonetician uses to note the differences in sounds when the letters are alike: note the difference in the sound of "t-h" in these two words:

the
tooth

Again, the phonetician can note the difference in this way:

ð for the beginning sound of the

θ for the ending sound of tooth

ATTENTION

Again, draw the generalization that there are more sounds in the language than there are symbols (letters) to represent these sounds. There are twenty-six letters (written symbols) but there are forty-five sounds which these letters must represent when we write words.

Teacher may wish to place terms on chalkboard.

In the last phase of our work we looked at language as a kind of code. Several terms used were "sender" (or encoder), "message" or code, and "receiver" or decoder. We agreed that a code was made up of "units" or "symbols" which carried the message when the "encoder" put them together in a way that the "decoder" would understand.

Excerpt #3 - "I Learned to Speak" from THE STORY OF MY LIFE by Helen Keller.

I will give each of you a copy of Excerpt #3 from THE STORY OF MY LIFE by Helen Keller. As you read this excerpt, watch carefully for examples of this "communication" process -- that is, the process of "encoding and decoding."

After the reading of Excerpt #3 Discussion

Discuss:

1. What was the major reason for H. K.'s happiness at learning to speak?

    (could communicate with many others besides her teacher; could talk to parents, etc.)

2. Why was it so important to H. K. as a person to learn to speak?
3. How does inability to speak hinder a person?
4. What kinds of limitations does it impose?
5. What does speech allow us, as humans, to do?

Directions for Writing Assignment I

On the worksheets I will give you, make two lists as directed. One list should contain those activities you engage in which require no knowledge of language. The other list should contain those situations in which language is involved. In Part I, summarize the major activities that would have to be discarded if you could not speak, read, write, or listen.

In Part III, write one summary sentence telling which language activity you would miss most if you were unable to speak, read, write, or listen.

ATTENTION

In the Discussion of the Writing Assignments, try to establish these points:

(In Part II, the students should summarize the activities they would have to give up if they knew no language; after the papers have been evaluated, it might be wise to try to draw the generalization that language activity is not only personal, with high personal connotations, but that is is also the key to social situations. Without language, we would be, in essence, alone and unable to communicate.)

(With more able students, it might be possible to carry this discussion to more philosophical positions. Why is it so important to understand language? Would democracy exist if we had no language? What would happen to us if we all had to give up language?)

Sample Summary

"The excerpts you have heard and read about the life of Helen Keller tell us a good deal about how H. K. learned a language. They do not tell us, however, very much about how we learned language as little children. It should be remembered that Helen Keller was not an infant when she first began learning language.

Sample Introduction

"How and why did you learn your language? (Informally discuss how we learned our language. Draw conclusion that the process is complicated and will be studied in greater detail in a later unit.)

Now that we have discussed how you learned your language, we might also wonder how language itself came about. Rather than asking how an individual child learns language, we can ask "How and when did mankind begin to use language?" Many people have asked this question, and many theories have been developed to explain how language came about. The next phase of this unit will deal with "how language came about."

"Who first invented language? What prompted him -- or them -- to invent language? Do we have any "proof" for any of the theories about language beginnings?

As you read the essay on 'Where Did Language Come From?' you should try to determine how each of the theories of language development 'stands up.' Is the theory a good one? Is there any support for it?

"To aid you in judging each of the theories, you should work with Worksheet #2 near at hand so you can fill it in as you read. If you will look at Worksheet #2 now, you will see what you are expected to do.

Procedure for Completing Worksheet #2

Explain each of the parts of the Worksheet. Point out that the first row of blank spaces has been filled in as an example of what the students are expected to do. Explain each of the parts of the Worksheet.

Directions:

Note that the first column lists the names of the various theories of language origin.

In Column #2, you should write what the theory means. We shall refer to this as the claim, as for example, in the sentences, "What claim does the author make?" or "What does the author claim about his theory?"

In Column #3, write the support used to substantiate, or "back up" the claim that the author has made. Look at the example again. You will see that the author has given an example and explained the theory in an attempt to document his claim.

Teacher may wish to write these terms on the chalkboard.

This form of support is known as "opinion" as is shown in Column #4. There are other forms of support.

2

For example, one could use opinion, expert opinion (presumably by someone who knew a good deal about the topic), statistics, or examples to try to "prove" the worth of his claim about the origin of language. In many cases, when we are building a case in order to "prove a point" we may use several of these forms of support.

If we are very skillful at argument (not the usual kind of argument, but the kind in which we try to prove a point by using our reason and forms of support) we will work very hard to develop several forms of support to "back up" our claims.

As you fill in Column #4, be careful to note if more than one form of support is used.

> (You may wish to discuss these directions, especially, repeating any of the directions that may have been confusing. Go back and review the terms for the various kinds of evidence.)

Procedure

After students have finished reading "Where Did Language Come From?" (and before the worksheets are collected) discuss, using questions as follows:

Sample Discussion Questions

Discuss:

1. Which of these theories seems to be the most worthy? Which has the most support?
2. Why does the author say that you may want to develop a "ninth theory"?
3. Have any of you heard of any other theories not discussed in this article?
4. Why is it so difficult to prove a theory of how language started?

> (Develop the point that there is no direct evidence; that there are no recordings and no written records.)

5. Which do you suppose came first -- writing or speaking?

(probably speaking)

For many reasons it is important to recognize that speech is language quite as much as writing is language. Think of our earlier discussion about how we learned our language. Remember what we decided about what our first experiences with language were?

(experience with spoken language)

Many persons think of reading and writing when they think of language.

NOTE TO TEACHER:
This discussion might be converted to a written assignment by giving students the thesis statement "language can exist without writing" and asking students to illustrate the thesis.

1. Can you think of cases in which speech exists without writing?

   (in young children; cultures which do not have a system of writing; speaking adults who have not learned to read and write)

2. Is it correct to say that cultures without a system of writing are cultures without a language?

3. Is it correct to say that persons who do not read and write are persons without language?

Sample Summary

"The topic you have been reading about -- the origin of language -- has intrigued scholars of language for many years. The origins of language go back so far, however, that the best we can do is make guesses about the way in which language originated. When such guesses are made by well-known scholars, the evidence they supply is often known as "expert opinion." If the name of these men were given to you, and you knew which ones were experts, you would have had an easier time judging the adequacy of each of the theories. The evidence for

for each of these theories, however, is so slight that language scholars have, in the main, given up the search. Not all of them, however, have been willing to do so, as we will see later in an article, called "Talking Animals."

Sample Transition

"We have now looked at how Helen Keller learned language. We have noted that language is a code, composed of "units" that carry some kind of message. We know that these sounds can be put together to make words and that words can be put together to make sentences. In addition, we know that there are methods by which representations of our language code -- letters or symbols -- can be used to represent the sounds. In summary, we are dealing with a rather complex kind of code.

In the next part of this unit, we will look at the sounds made by animals. .

Sample Discussion Questions

Discuss:

1. To what extent to animals communicate with one another?
2. Do animals communicate with human beings?
3. Can human beings communicate with animals?
4. Do you know of any examples of any of the above happening?

(devote some time to this background discussion)

5. In what ways are the systems of animal communication like those of humans?
6. In what ways are the systems of animal communication less flexible and less specific from those of humans?

Directions - Distribute Excerpt #5

"Turn to the article called "Talking Animals". As you read this article, look for specific answers to the questions we have discussed. You should assume that the author has based his article on sound scientific observations.

After students have finished reading "Talking Animals" distribute Worksheet #3

The last worksheet we used was used as the article was being read. This time you will have to remember some of the points made in the article without going back to look. Before you begin, though, let me remind you of some of the terms we used on the last worksheet.

1. We used the term claim. Do you remember how we used that term?
2. We used the term support. How was that used?
3. We used several terms about forms of support. What were these?

(example, opinions, expert opinion, statistics)

Now read the directions for Worksheet #3 while I read them to you.

We call the use of evidence to back up a claim the process of argument. We referred to argument once before in our work. It should be remembered that the kind of argument we are referring to here is not a "yes - no" or "do - don't" kind of quarrel. Rather, it is a process by which we examine certain forms of support (as listed on Worksheet #2 in the directions) used to document (or back up) a claim.

On this Worksheet #3, you are asked to give some specific examples of the different forms of support in Column 2. In Column 3, classify the forms of support.

In Column 4, you should make a personal judgment. Are the forms of support sound? Do they support the claim?

Is that support adequate?

NOTE

If the teacher wishes to have students make comparative judgments, which might be valuable with more capable students, she may have students write on the backside of Worksheet #3 an analysis of the support for the claim in "Talking Animals" as compared with the support for any or all of the theories indicated in "Where Did Language Come From?"

Sample Lecture - Discussion

We've just spent some time talking about the differences between animal and human communication. We discovered that animals do have systems of communication, although their systems are not as flexible as the systems of human communication. We're going to be considering the humanizing power of language, the tremendous different possessing the ability to communicate makes.

Wolves are animals which have their own system of non-verbal, or unspoken, communication. They live in groups, called packs, and the cubs learn the ways of life from the elders.

Sample Discussion Questions

1. How do you think cubs learn how and when to howl?

   (By observing and imitating the sounds made at particular times by their elders.)

If you were a wolf cub you would learn that in wolfe society there are conventions -- that is, mutual agreements, or understandings, between wolves, that howling time occurs only at night. But, you say, you are not wolf cubs, you are people! What would have happened to you if, as a baby, you had been taken to live only with a pack of wolves?

Sample Lecture-Discussion Continued

I am going to tell you about two "wolf-children." They were human girls named Amala and Kamala. Captured in India in 1920, they were living with a pack of wolves in a den. (It is supposed that the mother wolf carried them from fields where they were momentarily left by their mothers.) They could howl, but could not speak. They could crawl, or run about on all fours, but could not walk upright. They would drink milk, but would eat only raw meat or dead animals. If disturbed while eating, they would bare their teeth and growl.

At the time they were found, the older girl, Kamala, was about eight, and the younger girl, Amala, was about one and a half years old.

Sample Discussion Questions

2. How do the communication skills of ordinary children at these ages compare with those of the "wolf children?"

   (The normal toddler, though it would possess some skills that Amala didn't, would not be too far ahead of the "wolf children." However, in the case of Kamala we find a vast difference. The average eight year old has a vocabulary of almost 3,000 words, plus a command of the structure of the language.)

3. What are the things present in the environment of the average child and missing in the environment of the "wolf children" which would account for the development of these complex skills?

   a). Other human beings with whom communication can take place.

   b). A mutually understandable system of sounds used by those human beings in interacting with one another.

   c). Shared experiences about which the human beings in question communicate with one another.)

At the time of capture, Amala had probably lived with the wolves for a year. She behaved as would a wolf cub. Yet, before her death, at the age of two and one-half years, she had learned to use three or four words meaningfully. Perhaps we could assume that in time she could learn to become human. But, Kamala's progress was slower.

Sample Discussion Question

4. Why do you think it was more difficult for Kamala to learn language?

   (She had been away from human society for a longer period of time than Amala. Whatever she might have begun to learn and become aware of in human society she would have forgotten.)

Sample Lecture-Discussion

Scientists have pointed out that the first five months of a baby's life involves tremendous muscular activity, and this includes use of the vocal muscles. The sounds produced by the baby are usually closely related to his physical state, hunger, tiredness, etc.

Let me read to you a well known psychologist's comments about the development of these skills:

> "...The control of sound production by the infant appears to follow a definite pattern involving 1) the control of volume (usually during the second month of life, 2) the control of pitch (usually within the third or fourth month, 3) the control of sequency (beginning about the fifth month). Long before the child is able to speak words, he develops a pattern of sound production that conforms to those of other humans around him. Soon he learns to repeat the same sounds as these humans, then specific words, then phrases and sentences (often without any relevance to their meaning.)"*

---

*from Ian Gregory: Psychiatry, Biological and Social, W. B. Saunders Company (Philadelphia and London: 1961), p. 222, Chapter entitled "Language, Communication, and Interpersonal Relationships."

But Kamala's development was stopped very abruptly when she was carried to a wolve's den. There she spent eight years of her life. At the time of her capture, Kamala seemed to have learned the wolf-ways thoroughly.

Sample Discussion Questions

2. Why do you think she adapted these ways?

   (In order to survive.)

6. How did she learn these ways?

   (Through imitating the wolves.)

7. After being taken to the orphanage, what did Kamala have to learn in order to regain her human ways?

   (She had to learn not to howl, to stand on two legs, to walk, to use her hands as hands, to smile, to cry, and to become a part of the society around her.)

In order to more fully understand the learning task Kamala faced, listen to the following excerpt from a description of her behavior after she had been at the orphanage for one year:

"Midnight o 1:00 a.m.	Prowled about in the darkness, in the house, courtyard and outdoors, sniffing for food and searching for escape.
1:00 a.m.	Howled the traditional wolf howl of earlier years. Prowled.
3:00 a.m.	Howled again the traditional wolf howl. Prowled.
4:00 a.m.	Greeted by Mrs. Singh and by fellow orphans who tried to join with words and beckoning gestures. Message by Mrs. Singh.
5:30 a.m.	Bath.
6:00 a.m.	Breakfast food offered. Taken outdoors for toileting.
6:15 a.m. to 11:00 a.m.	Sat "musing" in a corner facing the wall. Occasionally turned around briefly to glance at Mrs. Singh and babies.
11:00 a.m. to 12:00 a.m.	Morning tea with the babies. Kamala takes crackers put on stool but will not take them directly from Mrs. Singh.
12:00 noon	Taken out for toilet.

12:15 to 2:00 p.m.	Sometimes slept.
2:00 p.m. to 5:00 p.m.	Sat in corner, facing wall.
5:00 p.m.	Out for toilet.
5:15 p.m.	To dining room for food. Lapped milk. Ate crackers left on stool.
5:30 p.m. to 10:00 p.m.	Became restless and active. Played with dogs and other animals.
10:00 p.m.	Howled the traditional wolf howl.
10:00 p.m. to 12:00 p.m.	Prowled and slept."

Certainly at the age of nine, Kamala was still very much a wolf in her behavior, both personally and socially. But compare the above with the following excerpt, taken from Mrs. Singh's diary of Kamala at the age of fifteen:

"12:00 p.m. to 4:00 a.m.	Slept through the night.
4:00 a.m. to 5:00 a.m.	All up and dressed. Bath.
5:00 to 6:00 a.m.	All went for a walk, Kamala with the others. Sometimes walked and sometimes went on all fours. Always wore a dress like the others.
	Talked in two and three word sentences.
6:00 to 7:00 a.m.	Breakfast with the others. Toileted in the bathroom.
7:00 to 8:00 a.m.	Went to morning service, but not to school.
	Joined shrilly in hymn singing.
8:00 to 12:00 a.m.	Ran errands ... helped care for the babies; followed Mrs. Singh about.
12:00 to 1:00 p.m.	Lunch.
1:00 to 4:00 p.m.	Amused herself about the house and yard. Played in the swing...

4:00 p.m.	Went with the children to help collect eggs.
4:30 p.m.	Selected her own clothes from the wash and took them for ironing. Toileted in bathroom.
5:00 p.m.	Tea with the others.
5:30 to 6:30 p.m.	Evening stroll with the others.
7:00 to 12:00 p.m.	Slept, in the dormitory.

Sample Discussion Questions

NOTE: Students will need some help in understanding the term "mediating."

8. What are the major differences between Kamala's behavior as reported in the two diary entries?

(In discussing this question the teacher should emphasize the asocial nature of the actions in the first report, and the social nature of those in the second report. Also note the mediating role of language in all of the activities of the second report.)

9. What, really, had Kamala learned?

(A pattern of behaviors including language which made her truly "human" being.)

Before we leave Amala and Kamala let me ask you about the tone of the "reports" we've been reading.

10. Do you think that the "observer" who is telling us about Amala and Kamala is "objective" and "unbiased?"

(No.)

The teacher might raise this same question by having the students look first at the report. A series of leading questions could then be used to lead students to discover the bias of the observer as it operates to color her perception of the children's behavior.

11. Why?

(The tone of the statements which the "observer" uses in describing the actions of the "wolf" children indicates a tendency to interpret behavior in order to make it fit the "observer's" expectations rather than report it as it is.)

Sample Lecture-Discussion Continued

Despite these difficulties this account of the wolf children and our discussion of it has demonstrated that language is one of the distinctive features of what we could call typical human behavior. The child raised without the benefit of human parents or society would

Sample Lecture-Discussion Continued

indeed be something less than human, and one of the most important characteristics that would be missing is the ability to communicate with other humans.

In a sense we have already discussed some of these notions in our discussion of the way Helen Keller acquired the ability to communicate. Helen's case differs from those of Amala and Kamala in that the problem Helen faced is not the result of a lack of human society. As a matter of fact, Helen had considerably more success in learning to communicate than did Kamala.

SAMPLE DISCUSSION QUESTION

The teacher should refer students to Excerpt #1. An alternative would be to have students read relevant sections of The Miracle Worker. Of particular interest are the sections where Helen's behavior, before she acquires the ability to communicate, is animal like.

12. On the basis of what you know about Helen's case and the environmental conditions necessary for language learning, how would you explain her success?

    (Helen, though totally deaf and blind, still lived in human society; she had contact with people and objects of human society. Kamala could see and hear but she had no contact with the human world. Further, Annie Sullivan, Helen's teacher, was herself blind: she shared Helen's experience to some extent. She also had more scientific knowledge of teaching language than Kamala's teacher.)

Sample Summary and Transition

Let's take time right now to pull together some of the things we've talked about so far in this unit. You should try to remember four basic topics that we've taken up so far:

1. Language is learned. What have we learned about how language is learned?

2. We can think of language as a code. What have we learned about the code of language?

3. Language must have started somewhere. What have we learned about the origins of language?

4. There are differences between human and animal communication. What have we learned about those differences?

In answering the above questions, the following points should be established:

1. Language is learned by mimicking those about us. We tend to learn words for concrete things first; then we learn words for abstract ideas.

2. Words and things are not the same; words stand for things.

3. Language is a code, involving:

    sender (encoder)
    message (code)
    receiver (decoder)
4. Language is first manifested in sounds, put together in words, to form sentences which carry messages.

5. Writing, the use of marks to stand for sounds, is a secondary representation of the scale.

6. There are more sounds in the language than there are letters of the alphabet. This inadequate representation of sounds by letters of the alphabet (together with other factors) accounts for the use of one letter to represent a variety of sounds, and for the fact that one sound can be represented by a variety of letters.

NOTE:

WITH MORE ABLE STUDENTS, TEACHER MAY WISH TO DISCUSS THE ADEQUACY OF THE ALPHABET IN REPRESENTING OUR 45 PHONEMES. If so, the following information will be of assistance in the discussion:

*three letters (c, k, q) may represent the sound .

* "x" represents no distinctive sound; it represents the sound of "k" or "g" combined with "s" as in X-ray and extra.

*each of the vowel letters (a, e, i, o, u) represents more than one vowel.

*a number of consonant letters represent more than one consonant.

7. Language is a personal activity. Many activities would have to be discarded if we knew no language.

8. Language is a social instrument. Without it, we should be quite isolated; many of our activities would have to cease.

9. The origins of language are obscure. Many theories about the beginnings of language have been expressed.

10. Animal and human communication have similarities, but the chief differences lie in the human's ability to deal with past and future events (displacement) and to produce new and different arrangements in his speech to describe new or different ideas (productivity).

Sample Summary and Transition

We have examined a number of aspects of language so far. Let's go back to language as a code and examine how the parts of the code work so that we can understand our language and its operations more fully.

You will recall that we said that language was a kind of code made up of several parts.

Sample Discussion Questions

Discuss:

1. What are the parts of the linguistic code?

   (sounds, words, sentences)

2. Who are involved in sending and receiving the code?

   (encoder -- speaker or writer)
   (decoder -- listener or reader)

Now we're going to concentrate on the sounds of the code. To do this we'll need to use a couple of special terms.

Phones and Phonemes

Discuss:

1. How many words can you think of that include the root "phone?"

   (telephone, phonograph, symphony, microphone, phonetics, saxophone, cacophony)

To get a response, it may be necessary to have the students tell what some of the words mean.

2. Looking at these words, what do you suppose the word element "phone" refers to? What do these words have in common?

   (they all have something to do with sound.)

Phone is also a word all by itself, and it means speech sound. If you looked it up in the dictionary, you would find a definition that goes something like this:

> Phone -- "an element of speech; a single articulate speech sound."

If there is time, as a foreign language teacher to teach the class a few phrases including sounds that do not occur in English.

3. Can you think of any sounds you can make with your mouth that are never used in English? If any of you have studied a foreign language, did you have to learn to make sounds that you don't use ordinarily?

   (German /X/ as in "nicht," French /y/ as in "tu," Spanish trilled /R/ as in "Rio.")

4. There are many, many possible phones that human beings can make, and any one language only uses some of them. In addition, there are ways these sounds can be varied. Can you think of any?

   (they can be louder or softer, higher or lower in pitch, closer together or farther apart.)

5. So there are many possible speech sounds that are never used in English. Some of them would be difficult for you to make now. Why is that so? Why do foreign language teachers say that small children learn to make foreign sounds more easily than adults?

   (because they are not as accustomed to the sounds of English.)

6. When you were a baby, you could make any sound as easily as another. One of the first steps in language learning is sorting out the phones of your language from the range of all possible phones. Think back to what we said about language learning. How does it happen that American children finally learn to make only the sounds of English?

   (these are the ones they hear; these are the only ones that can be used in words that get a response from the people around.)

7. The study of speech sounds is called phonetics, and the kind of linguist who does it is a phonetician. A phonetician listens to a long stream of continuous speech, and pays careful attention to the sounds that are made. When I say the word "bat," how many distinctive sounds do you hear?

   (three)

Sample Discussion Questions Continued

8. What are they?

    (they are /b/, /a/, and /t/.)

Be sure the students do not simply give the letters of the alphabet; they should try to make the sounds in isolation. Explain that the letters in the alphabet are not the same as the sounds of English.

9. If I substituted the phone /p/ for /b/, what would the word be?

    ("pat")

10. Does the substitution of one sound change the meaning of the word?

    (yes.)

    In English, the phones /b/ and /p/ are distinctive units of sound. They contrast, and the contrast signals a difference in meaning. The phonetician calls this a phonemic contrast, and the distinctive units of sound are called phonemes.

11. Words like "bat" and "pat" are called minimal pairs because only one sound makes the difference in meaning. Can you think of some other minimal pairs?

Write on the board "keel," "cool," and "call." Ask somebody to read the words.

12. Would you say that the first phone in each of the three words is the same?

    (students will probably say they are the same.)

    Are you sure? Say the three words to yourself and try to picture the position of your tongue in the back of your mouth as you say them.

Persist until the students realize that the point of articularion is lower in each successive word.

    So these three sounds are not quite the same, but we are not ordinarily aware of any different at all. These sounds contrast, but they do not make any difference in meaning. This kind is called phonetic contrast. We are going to look into some more sounds that contrast phonetically.

Say the two words several times then have the students say them. Have them hold the backs of their hands in front of their mouths so they can feel the aspiration.

13. Is the /p/ sound in "pin" different from the /p/ sound in "spin?"

    (The /p/ in "pin" is followed by a puff of air, and the /p/ in "spin" is not.)

14. How about the two /b/ sounds in the word "bib?" Is the first one the same as the second?

Some students will find that the first is aspirated (followed by a puff of air), and the second is not. Other students when saying the word slowly will aspirate both.

The teacher should pronounce the word both ways several times, to be sure everyone can hear the difference in sound.

15. When I change the sound in these words, do I change the meaning?

(no)

16. If I made the last sound /d/, would I change the meaning?

(yes)

One of the jobs of the phonetician is to find out which sounds in a given language signal difference in meaning, that is, contrast phonemically, and which ones do not. When he hears that Americans mean something different when they say "big" from what they mean when they say "pig," he knows that /b/ and /p/ are two separate phonemes in English, though in some languages they are not. When he hears you say "bib" two different ways without changing the meaning of the word, he can be sure that there is no phonemic contrast between the two sounds. In English both of them belong to the same phoneme, which is written /b/. A phoneme, then, is a category including all the phones in a language which do not signal a difference in meaning.

If students don't understand the meaning of "phoneme," this analogy might help. Write the letter "a" on the board in several different styles of handwriting, and explain that although the marks don't look the same, the differences don't change the meaning of the letter, and we usually don't notice them. Similarly, although we can hear the differences between the variations (allophones) of a phoneme if we try, we ordinarily ignore them because they don't affect our ability to communicate.

NOTE TO TEACHER:
Different languages have different numbers of phonemes. It would be worthwhile to have the students figure out in class what the phonemes of English are. A list of thirty-eight is provided for reference.

See MPEC Unit 1005

SUPPLEMENTARY ACTIVITY

Simplified list of segmental phonemes of English:

p	as in pie
b	bye
d	die
t	tie
f	fie
v	vie
m	my
n	Nye (Louie)
s	sigh
s	shy
l	lie
h	hi
g	guy
k	chi
r	rye
w	wye
	thy
	thigh
c	cheap
j	jeep
n	bing (contrasts with n as in bin)
z	pleasure (contrasts with j as in pledger)
z	Zen
y	yen
iy	peel
i	pill
ey	pail
e	Pall Mall (pronounced pell mell)
	pal
	as in the second syllable of people or the first syllable of pulverize
a	pall
uw	pool
u	pull
ow	pole
	Paul
ay	pile
aw	Powell
oy	poyl (that is, a Long Island pearl)

Write on the board:

modan garu
nairon sutokkingu
sekkuso sutori
doresu rihaasaru
garu furendo
basaboru

If not, have several students try reading them aloud, first separately, then in unison. More leading questions, such as 2 and 3, may be necessary.

1. I have written six Japanese phrases on the board. All of these were once English phrases, They were taken into the Japanese language, and their pronunciation changed so that they would sound more like Japanese words. Can you tell what any of the original English words were?

   (probably not)

Discussion of Sounds, continued

2. What kinds of English words do you think would be likely to be picked up by people who speak foreign languages?

   (names of American products, popular songs and dances, sports terms.)

3. Is there anything on the list that looks like the name of an American sport?

   (basaboru -- baseball)

4. When English "baseball" became Japanese "basaboru" what sound changes took place?

   (extra vowel between "s" and "b"
   "a" became "o"
   "l" became "r"
   extra vowel at the end)

5. We are not going to be concerned with changes in vowel sounds, because they are not very regular. We are, however, interested in the distribution of both vowel and consonant sounds -- in what places they appear in words. Thinking only of sounds and not of spelling, what do you notice in all these words about the positions of vowels and consonants that is different from English?

   (consonants never appear in combination.)

Use the same kind of procedure to identify the other phrases. Establish with the students, on the basis of these examples, two principles:

a) Japanese has no phoneme "l." It is replaced with "r."

b) In Japanese consonants never occur singly.

6. Keeping in mind this fact, and also the change from "l" to "r", can you figure out what any of the other words might be? Apply these principles to "nairon sutokkingo." What do you get?

   (nylon stockings)

We don't have enough evidence to make any generalizations on the basis of complex examples, such as the disappearance of the "r" in "modan" and "rihaasaru." We know there is an "r" phoneme in Japanese, but we can't tell under what circumstances it occurs and under what it doesn't.

Pass out Worksheet #4 and go over the directions with the students. Some teachers may prefer to use the sheet with able students only and/or convert the worksheet to a classroom discussion.

For teacher use: Discussion of Phones and Phonemes in Lecture Form

The sounds we use when we speak are called phones. The dictionary definition of phone goes something like this: "an element of speech; a single articulate speech sound." You can probably think of several words in English having to do with sound that have phone as one of their elements: telephone, phonograph, microphone, phonetics, saxaphone, cacophony. By itself, phone means speech sound.

There are many, many possible phones that human beings can make. Any one language only uses some of them. If you have studied a foreign language, you probably learned to make sounds you never use when you speak English. The German /X/ as in "nicht," French /y/ as in "tu," and the Spanish trilled r /R/ as in "rio," are all sounds that never occur in English, except when used by foreigners.

Think of all the sounds you can make, then think of all the ways you can very them: make them louder or softer, higher or lower in pitch, put them closer together or farther apart. Many of them would be very idfficult for you to make now, because you're so used to the sounds of English, but when you were a baby, you could make any sound as easily as another. One of the first steps in language learning is sorting out the phones of your language from the range of all possible phones. American children get accustomed to using only English sounds, because no other kind can be used in words that get a response from the people around. After they get into the habit of using just phones from their own language, other ones are difficult to make.

The study of speech sounds is called phonetics, and the kind of linguist who does it is a phonetician. A phonetician listens to a long stream of continuous speech, and pays careful attention to the sounds that are made. When he hears someone say "bat," he notes that three different (distinctive) sounds were made: "b," "a," and "t." And he has an elaborate system of analysis for identifying them. He also notices that if the speaker substitutes "p" sound at the beginning of the word, the meaning is changed. He concludes that in the language these phones are distinctive units of sound. They contrast, and the contrast signals a difference in meaning. This kind of contrast is called phonemic, and the distinctive units of sound are phonemes.

There is another kind of contrast that does not signal a difference in meaning, and we are ordinarily not aware of it at all. This kind is called phonetic contrast. Say the word "bib." You can probably tell that the "b" sound at the beginning of the word was not quite the same as the "b" sound at the end. If you hold the back of your hand in front of your mouth, you can feel a puff of air when you say the first "bib", but there may not be any when you say the second. The point is, whether you say "bib" (with aspiration, (b) or "bib" (without b, or "bib") nobody is likely to notice. The difference is too small, and it doesn't change the meaning. Here's another example. Say the words "keel," "cool," and "call." Although you may not be able to hear the differences in the "k" sound, you should be able to feel that they are not made in quite the same place in your mouth. You can see, then, that we use many more phones than we do phonemes.

One of the jobs of the phonetician is to find out which sounds in a given language signal difference in meaning, that is, contrast phonemically, and which ones do not. When he hears that Americans mean something different when they say "vat" from what they mean when they say "fat," he knows that "f" and "v" are two separate phonemes in English, though in some languages they are not. When he hears you say "bib" two different ways without changing the meaning of the word, he can be sure that there is no phonemic contrast between the two sounds. In English both of them belong to the same phoneme, which is written /b/. A phoneme, then, is a category including all the phones in a language that do not signal a difference in meaning. Different languages have different numbers of phonemes. People who speak English use forty-five.

Discussion of Worksheet #4

Ask the students for their conclusions and discuss them in class. For Part I, students will simply come up with a list of correspondences between phonemes:

English	Greek
sh	s or t
ch	ts or k
d	th (ð)
j	dz
b	v
w	v

Part II is more difficult. Students will readily see that Chamorro has no phoneme /v/ and seems to substitute /b/ consistently. They will conclude the /l/ is changed to /d/ or /t/ in the final position, but they should note that the phoneme /l/ does appear in Chamorro, as in the word "colat." /r/ will cause problems. In these few examples, it remains unchanged initially, changes to /t/ next to a consonant, changes to /l/ between vowels, and becomes /d/ finally. Many more examples are needed to make any conclusive statement about the phoneme /r/.

In Part III, students should notice the maximum of two consonants in a consonant cluster. The Arabic speaker must break up a cluster of three or more with a linking vowel.

There are a number of regular sound changes that the students should identify easily:

English	Arabic
th	s or t
e	i
ch	ts or k
j	zh
p	b

To explain why the second /p/ in Pepsi remains unchanged, and the first /s/ in Spenser becomes /z/, describe the difference between voiced and unvoiced consonants. Students can feel the difference between /s/ and /z/ and /p/ and /b/ by holding the larynx between thumb and forefinger and making the sounds. They feel a vibration, or buzzing, of the vocal bends only when pronouncing /p/ and /b/. These sounds are said to be voiced.

In Arabic no voiced consonant is found next to a voiceless consonant. One of them must be changed so that there are either two voiced or two voiceless consonants next to each other.

1. Why, then, does the second /p/ remain in "Pepsi?"

   (to accord with the /s/, which is voiceless.)

2. What other examples of this phenomenon do you find in the word list?

   (shikuzbeare, zpinse, ships.)

Discussion of the System of Morphemes

Procedure

Write these words on the board and ask the students to make a general statement about the difference in form between the words in the first group and the words in the second. Once they realize that the words in the second group are combinations of something, explain that they are combinations of morphemes.

We might understand now that there is a system and order to the sounds of English. Usually, though, we use the sounds in some combination, not all by themselves.

Group I	Group II
rock	restless
squall	childlike
over	hangover
crab	unkind
straight	friendly
real	spiders
anvil	actor

Morphemes are units of meaning. All the words in the first group are single morphemes -- they have meaning, but they cannot be divided up into any smaller units that have meaning. Because these morphemes can stand by themselves, they are called free morphemes.

Discussion of Morphemes Continued

The words in the second group are combinations of morphemes. A morpheme that is found within a word is called a bound morpheme. Many morphemes can be either bound or free.

1. In the sentence, "If you don't hang up your jacket, you can't have any dinner," is the morpheme "hang" bound or free? Why?

   (free, because it exists by itself)

2. In the sentence, "Monday morning Joe had a hangover," what is it?

   (it is bound)

3. What morphemes do you find in group II that are always bound?

   (un-, -ly, -s, -or)

   a. You may have had trouble deciding whether the -or in "actor" is always a bound morpheme or not, since there is a separate word "or." Linguists say that this kind of "-or", the kind referring to the person who does something, is always a bound morpheme, and it is just coincidence that there is also a separate word "or."

   b. It is often hard to tell whether a word is a single morpheme or a combination of morphemes. Given the word "childlike," it is easy to see that the meaning of the whole word domes directly from the meaning of the parts: "childlike" means "like a child." There are other words that just happen to have parts that are also morphemes. "Heron," for instance, happens to contain the morphemes "her" and "on." It is easy to see that this occurred just by change; the meaning of "her" + "on" has nothing to do with the meaning of "heron." However, there are some words in our language that you can't be sure about, and you have to ask a linguist whether they are single morphemes or combinations.

Procedure: Optional Worksheet #5

Discussion of Sentences

Sentences are the third part of the linguistic code. A sentence is a pattern of words put together to carry a

Discussion of Sentences Continued

complex message. Even though the sentence may appear to be simple, when we analyze it in terms of the sounds and words in it, it turns out to be very complex indeed.

We will not go into sentence patterns at this point, except to make one point. In English, as in some other languages, the order in which we put words makes a considerable difference. For example, we simply cannot take a group of words and throw them together in any fashion and assume that the message will get across to our listener! Suppose we had these words from which to make a sentence:

List words on chalkboard.

the
the
ate
seed
bird

1. How many combinations could we make?

These and others:

a. the the ate seed bird
b. the ate the seed bird
c. the seed ate the bird
d. the ate seed the bird
e. bird the seed the ate

or

f. The bird ate the seed.

We could add many more combinations. However, only two of the arrangements would make grammatical sense:

The seed ate the bird.

The bird ate the seed.

These are the only two patterns that make grammatical sense using these five words.

Only one of the groups, however, makes what we call "common sense." We know that seeds do not ordinarily eat birds. Therefore the likely meaningful sentence is "The bird ate the seed."

From examples such as these we can deduce that the single most important feature of the grammar of our language is its word order. Later we will study those patterns which normally operate in our language to help us build sentences.

To the Teacher: Teachers who wish may desire to repeat certain aspects of the unit, with alterations, so that students may fully grasp the basic concepts involved.

Probably the best way of going about this would be to go back through the unit outline, providing additional examples, redefining terms, and the like.

No unit test is provided for this unit, although individual teachers may wish to construct such a test. Evaluation might be based on an examination of the extent to which students in Grade Seven grasp these fundamental notions.

Some definitive characteristics of human language are:

a. It is learned.
b. It is symbolic.
c. It is systematic.
d. The symbols are conventional.
e. The symbols are in the forms of sounds produced by the human voice.
f. Writing is a secondary representation.
g. Humans use language as members of a society.

Definition of language to be used in Unit 703 -- The People Who Study Language: "Language is the system of learned conventional spoken symbols held in common by a group (society, culture) of a people so that they may deal with each other meaningfully."

FOR USE WITH ABLE STUDENTS

SUPPLEMENTARY ACTIVITIES: On the pages following are several additional activities which may be used as enrichment activities with the more able students in your classes.

Sample Test

Sample Unit Exercises, which may be used as a Unit Test, are appended.

UNIT 701

SUPPLEMENTARY ACTIVITIES #1

In Mark Twain's Huckleberry Finn, an interesting conversation takes place between Jim, the slave, and Huck, his young friend. Huck has told Jim that the Frenchman says "Polly-voo-franzy?" when he wants to know "Do you speak French?" Jim objects, and the story goes on.

"Well, den, why couldn't he say it?"
"Why, he is a-saying it. That's a Frenchman's way of saying it."
"Well, its a blame ridicklous way, en I doan' want to hear no mo' 'bout it. Day ain' no sense in it."
"Loky here, Jim; does a cat talk like we do?"
"No, a cat don't."
"Well, does a cow?"
"No, a cow don't, nuther."
"Does a cat talk like a cow, or a cow talk like a cat?"
"No, they don't."
"It's natural and right for 'em to talk different from each other, ain't it?"
"Course."
"And ain't it natural and right for a cat and a cow to talk different from us?"
"Why, mos' sholy it is."
"Well, then, why ain't it natural and right for a Frenchman to talk different from us? You answer me that."
"Is a cat a man, Huck?"
"No."
"Well, den dey ain't no sense in a cat talkin' like a man. Is a cow a man? --er is a cow a cat?"
"No, she ain't either of them."
"Well, den, she ain't got no business to talk like either one er the yuther of 'em. Is a Frenchman a man?"
"Yes."
"Well, den! Dad blame it, why doan' he talk like a man? You answer me dat!"

PREPARE A SHORT TALK OR PAPER ON ONE OF THE FOLLOWING QUESTIONS

1. What does this incident tell us about languages in general? Is there one language for everybody to speak?

2. We learned in this unit that words stand for things or ideas. Do the same words always stand for the same things for everybody? Can you think of exceptions?

UNIT 701

SUPPLEMENTARY ACTIVITIES #2

Using the conversation on the page preceding, decide on the following information:

1. What claim was Huck making?

   How did he support his claim?

   What form of support was involved (opinion, example, statistics)?

   How valid is Huck's argument on the basis of the information given here?

2. What claim was Jim making as a counter-claim?

   What did Jim use for support?

   What form of support did Jim use?

   How valid is Jim's argument?

3. What is wrong with both of these arguments? What is lacking in each? How could this problem be solved?

UNIT 701

SUPPLEMENTARY ACTIVITIES #3

Prepare a speech or paper on the following:

We learned in this unit that language is highly personal. It is at the same time, however, highly social in nature. That is, language is the behavior by which we manage to communicate with one another. If we had no language, it was pointed out, we would have difficulty operating social situations; many would have to be adapted and/or discarded.

What would happen if each of us made up his own language? To what extent would we be able to communicate?

An interesting conversation along this line is that between Humpty Dumpty and Alice. This short excerpt will give you the gist of the conversation.

> "I don't know what you mean by 'glory,'" Alice said.
>
> Humpty Dumpty smiled contemptuously. "Of course you don't -- till I tell you. I meant 'there's a nice knock-down argument for you.'"
>
> "But 'glory' doesn't mean 'a nice knock-down argument,'" Alice objected.
>
> "When I use a word," Humpty Dumpty said, in a rather scornful tone, "it means just what I choose it to mean -- neither more nor less."
>
> "The question is," said Alice, "whether you can make words mean so many things."
>
> "The question is," said Humpty Dumpty, "which is to be master -- that's all."
>
> Alice was too much puzzled to say anything; so after a minute Humpty Dumpty began again. "They've a temper, some of them -- particularly verbs; they're the proudest -- adjectives you can do anything with, but not verbs -- however, I can manage the whole lot of them! Impenetrability: That's what I say!"

Here we have a different situation. Here is Humpty Dumpty supplying new meanings for words, and, in the process, confusing Alice. Can you think of situations in which this is done? For what purpose? What could happen if each of us made up his own meanings?

What conclusion can you draw about meanings as they apply to situations in which it is vital to communicate exactly what one means?

UNIT 701

SUPPLEMENTARY ACTIVITIES #4

In the unit just completed, you discussed the relevance of communication between animals and humans. In addition, you noted that dogs and other animals can make certain sounds to "tell" us their wants. What sounds do dogs make? After reading the article below, answer these questions in a short paper.

1. Why do people in different countries (speaking a different language) seem to "hear" different sounds from animals?
2. Look back at Supplementary Activities #1. Is the answer to Huck and Jim's problem related to the situation in the article below?
3. Think of the article below in relation to the "bow-wow' theory. Does the information given below tend to support or disprove the theory?

Leafing through a book in the Italian language the other day, we were suddenly brought up short by the following passage: "The little dog ran through the streets of Naples barking boo-boo, boo-boo, boo-boo at all the passersby."

We expected the next sentence to announce that this dog who spouted boo-boo had been whisked away to the nearest canine psycho ward for observation. But when the author failed to comment on this pooch's peculiar behavior, a disconcerting thought dawned on us.

Could it be that all the world doesn't see eye-to-eye on the fact that dogs say either bow-wow or woof-woof? Deciding that this question merited a survey, we immediately phoned the Italian Embassy in Washington. A charge d'affaires refused point-blank to bark over the telephone. Finally, however, an underling agreed to bark. It came through sharp and unmistakable: boo-boo (spelled in Italian bu-bu).

The news that 45,000,000 Italians were convinced their dogs barked like Bing Crosby was provocative enough to warrant a full-scale investigation of the whole international barnyard.

We must admit that our hopes for world unity have not been greatly heartened by our findings. Take the cow, for instance. Moo is American. The French have the piquant notion that Bossy gives out with a nasal meuh (pronounced as "mur" in demur). In India, a country where cows are sacred, they never say moo. Ganges cows say moe (rhymes with schmoe).

Frankly we don't know what to make of the rooster situation. But we'll tell you one thing: The rest of the world is sharply opposed to us in the cock-a-doodle-do department. Germany, Spain and Italy are all agreed that what this bird is trying to say is kikiriki (kee-kee-ree-kee),quiquiriqui and chicchiricchi, respectively. In Spanish-speaking countries, young roosters say quiquiriqui, but the old ones go quiquiriqoooo. France deviates slightly in favor of cocorico; Japan votes for kokekkoko -- all far cries from cock-a-doodle-do.

Most of the Western world goes along with the U. S. conviction that ducks quack. But you can't argue a Chinese out of the certainty that Cantonese ducks say ap-ap. Ducks in Japan go around spouting ga-ga; Arabic ones -- bat-bat; Rumanian -- mac-mac. If you should ever go duck hunting in Germany and hear a quack-quack, don't be too quick to shoot. In Germany, ducks go quack-quack all right, but so do frogs.

In their native habitat, Spanish cockers say how-how (jau-jau written in Castilian). French poodles in Alsace sit on the banks of the Rhine barking oua-oua (wa-wa), while lonely Dachshunds staring back at them from the German side fill their air with vau-vau, vau, vau (vow-vow). The Turks are under the impression that their hounds say hov-hov, hov-hov. Nor is there any arguing with the Russians. Wolf-hounds invented barking. And believe it or not, dogs in Moscow gather around the Kremlin at night and say vas-vas, vas-vas at the moon. It is in China, however, that the canine kingdom goes completely beserk. Their dogs say wang-wang, wang-wang.

From "How to Bark Abroad," by Leslie Lieber and Charles D. Rice from This Week, 1953.

UNIT 701

SAMPLE UNIT EXERCISES

1. During this unit you have learned something about claims and forms of support Now you will be given a chance to make some claims of your own and to support your claims.

   For example, you may claim that the New York Yankees are the best all-around team in the American league. What forms of support could be used to "back up" this claim?

   A. Statistics

      1. They had the best won-lost record last year.
      2. They had the highest team batting average.
      3. Their pitchers had the lowest combined earned-run average.

   B. Expert Opinion

      1. All the American league managers called the Yankees "the team to beat."
      2. Most sports writers pick the Yankees to win the pennant.

   C. Opinion

      1. My father, who has been a baseball fan for thirty years, thinks the Yankees are the best team.

      2. Most of my friends who follow baseball think the Yankees are the best team.

Choose one of the following claims, fill in the blank, then list the support you would offer to support your claim. Tell what form of support you are using.

CLAIM	SUPPORT	FORMS OF SUPPORT
1. The best all-around football team in the National Football League is ________________.		
2. The most popular singer (or singing group) making records today is ________________.		
3. The best pain-reliever available without a prescription is ___ ________________________.		
4. Dollar-for-dollar, the best car made is ________________.		

2. The following statements about language were some of the claims made during this unit. From what you can remember about the unit, list supports for the claim. Tell what form of support you are using -- example, statistics, expert opinion, or opinion.

CLAIM	SUPPORT	FORMS OF SUPPORT
1. We learn to speak our language by imitation.		
2. Language is a kind of a code.		
3. There are more sounds in our language than there are letters in the alphabet.		
4. Speech can exist without writing.		
5. Human language is more complex than animal systems of communication.		
6. There are several theories of language origin.		

Readings for

UNIT 701

INTRODUCTION TO THE STUDY OF LANGUAGE

Grade 7

Materials used:

Excerpt from *Through the Looking-Glass, The Complete Works of Lewis Carroll,* Modern Library, New York, pp. 243-5.

"I Learned to Speak" and "The Most Important Day," excerpts from *The Story of My Life* by Helen Keller. (New York: Doubleday & Company, Inc., 1902, 03)

CAUTIONARY NOTE

These materials are for experimental use by Project English Fellows and their associates who contributed to their development.

* * * * * * *

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Unit 701
Excerpt #4

WHERE DID LANGUAGE COME FROM?

The story of Helen Keller's discovery that "w-a-t-e-r" could stand for a "Wonderful cool something" that flowed over her hand represents an introduction to the idea of what a word is and to groups of words which we call a language. For the cornerstone of language, the development on which everything else hinges, is the first intelligible sound that an individual makes. Now we know the circumstances which led up to Helen's taking that first step. She had been prepared by her teacher who traced the letters w-a-t-e-r with her fingers; she had been taken out to the pump and had had water poured over her hand again while w-a-t-e-r was spelled. That tells us how Helen Keller learned about the one word and the thing it stood for.

But that does not tell us how we learned its use. How did we discover that a sound could stand for an object--not just for us, but for other people as well, so that even as small children we could ask for "water" or, probably "wa-wa," and expect to get some even when the water was nowhere in sight? Out of all the strange jabberings which children make, how did we learn to use only that relatively small number of sounds which made sense to our mothers and fathers (and very often, only to our mothers and fathers!).

The usual answer is that we learned by imitating our parents. While it was just as easy to say "goo-ba" for water as "wa-wa," "goo-ba" never got us the smiles, pats, and drink that "wa-wa" produced. In fact, "goo- ba" may have prompted a "No, dear. Water. Say water." And, if we were really thirsty and really listening, we probably responded with something closer to "wa-wa," and were rewarded by mother's smiles and scurrying to get the glass.

But to say that we learned language by imitating our parents brings up the question of "How they learned language?" Of course the answer is that they learned it from their parents, and their parents learned it from their parents, and so on and so on. And nobody seems to know whose parents, far back in remote times, were the first to make words and teach them to their children.

Although no one knows for sure how language started, people do have ideas about how language started. There are, at least, eight such ideas about the origin of language.[2] We will, however, discuss only five here. Some of them may sound strange, but because language extends so far back to periods before there were any written records, we have no proof as to which of these ideas is correct or if any of them are. But since such speculations are the most we have, they deserve some attention.

The first is the *gesture theory*. It suggests that man's speech was an outgrowth of what amounts to a *language pantomime*. After men began to associate certain signs with certain meanings (for example, a closed first with "fight"), it would not have been too great a step for men to use sounds *to accompany these gestures*. Gradually the sounds would become equal in importance with the gesture, and eventually the sounds began to supersede the gestures. The sounds continued to develop in importance until they began to carry the bulk of our meanings; now we tend to use gesture more for emphasizing or illustrating these sounds.

Adapted, with permission, from Beverly Beckman, "Symbolic Nature of Language," unpublished M. A. Colloquium, University of Minnesota, June, 1962.

[2] The discussion of these theories is drawn from Otto Jespersen, Language: *Its Nature, Development and Origin* (London, 1922), pp. 412-442.

Another idea is represented in the Ding-dong theory. This hypothesis says that everything originally gave off a specific sound which primitive man was able to hear and which told him what that thing was called. The assumption on which this theory rests is that there was some kind of mystical harmony between sound and sense which primitive man could understand with special abilities which we have since lost.

Third is the Bow-wow theory, which points to the sounds of nature as the source of man's language. It maintains that primitive man developed speech in imitation of the sounds he heard around him, such as the word "bow-wow" for "dog" or "bark." Apparently, "bow-wow" was as close as man could get to echoing the actual sounds a dog made. It should be noted that this sound of a dog barking is represented differently in various languages. (See supplementary activities section.)

A more elaborate explanation is offered by the Yo-he-ho theory which advances the idea that language originated as men found it necessary to work together in order to accomplish certain tasks. Assuming that men find it natural to release their breath strongly when working hard, this theory speculates that such a release of breath probably set the vocal cords vibrating and produced sounds. Eventually, certain sounds (such as "tug") would accompany some tasks (such as tugging) and in time these sounds became associated with the tasks themselves, thus becoming words for those tasks.

A variation from all of the above theories suggests that the playful jabbering of children, the spontaneous babblings of small children, is the source of language.

These five theories only represent attempts to explain the origin of speech. They do not prove that we did get our language in any of these ways. Possibly it evolved from a combination of these circumstances. We simply do not know. What we do know, however, is that the origin of speech in many ways still is a mystery. To the question, "Whence came the first word?" we can only shrug our imaginations and maybe come up with a ninth theory.

Unit 701
Excerpt #5

TALKING ANIMALS

By S. B. Kegler

Do animals talk? Can they "tell" one another how they feel, or that danger is present? Can they "communicate" with human beings? Can they learn the meaningful words that humans use?

These questions and others like them have puzzled linguists for a long time. In searching for the origin of language, a few linguists have put forth the idea that we can learn much about the origin of our language by observing the language of sub-human species of animals.

We do know, for example, that animals can "communicate" with one another. They can warn of danger, for example. They can share the fact that all is well after danger is past. They can share information regarding the whereabouts of food.

We know, too, that animals can "communicate" with humans. When we approach a strange dog and he growls, we certainly know that he is not happy with our presence. On the other hand, when our pet greets us when we return from school, his happy yelps and wagging tail tell us he is happy to see us. When he whines at the door, we know that he wants to be let out. Similarly, we can "tell" animals certain things; we can train our dogs to "heel," "sit," "speak," and the like. The question is, when the dog is "telling" us something, is he really talking to us? When he responds to some kind of order we have given him, are we really "speaking" to him?

We can find evidence of crows warning of approaching hunters, of fish courting one another in various kinds of gestures, of gibbons giving out a cry for "danger." How much of this is "communication?" How much of this is language? How does this animal communication differ from that of humans?

A linguist named Hockett has identified at least thirteen ways by which we can study the characteristics of "language." Human speech alone has all thirteen characteristics. Some of the thirteen are present in animal systems of communication, but they are less well-developed and far less flexible.

Two of the thirteen characteristics are especially important ones for us to understand. These two characteristics tell us much about the differences between human and animal communication. If we notice the ways in which a dog communicates, for example, we can note that he tends to use the same signals over, and over. We might say that his signal-system is limited. Another way of putting it would be to say that his system is "closed." The dog's system of telling how he feels, his needs, and the like, is very limited. He cannot invent new kinds of expressions. He cannot communicate ideas. If a dog came upon a new object, he would have no way by which to communicate information about this object to other dogs or to humans. Men who study language and language formation call this lack of productivity-- that is, the lack of the ability to say things that have never been said before and yet to be understood by other speakers of the same language. Man does have this productive capacity in dealing with his language to describe the world about him. Man can talk the many words he knows--words that stand for objects and ideas--and develop other new, complex ideas.

Are there any other elements of language that differentiate the man from animals in ability to communicate? One other important element is man's ability to talk about things that happened yesterday, or last week, or many, many, years ago.

Man can also talk about the future, and what he *plans* to do sometime in the future. Animals cannot do either of these. The animal is limited to the present; he can show you how he feels at the moment, but he cannot relate to you how he felt last week, or what he intends to do with the next bit of food he finds. This ability of man--to discuss the past and the future--is known as *displacement*. *Displacement* is the ability to talk about things that are remote in space or time, or both, from where the talking goes on.

In other words, man's system of speech is far more *flexible* than the animal systems of communication. In addition, it is far more specific. While the animal can warn of "danger," he cannot describe the kind of danger. The human being can be very specific about the kind of danger.

Let's go back, then, to the question we asked at the beginning of this article. Do animals talk? In a sense, *yes* -- they can "communicate" basic things such as the presence of danger, presence of food, or what they feel. Can animals communicate with human beings? They can "tell" us (especially our pets can) some things, in a very limited way; they are hungry and want food, they are thirsty and want water, etc. In many respects, we have trained the animal to "tell" us these things, or to "ask" for these things. The animal cannot develop a new idea and "tell" us about it.

Can humans communicate with animals? Can our pet dog understand the meaning of the word "down" when we down "Down!" The pet dog understands the command, but he has only one meaning for the word. We could use any word in the training of the dog (such as "bizzik"), and as soon as he associated that word with the act he was to perform, he would understand the command and perform the act. He would lie down when we gave the command "bizzik!" Many animal trainers in circuses use number commands or nonsense words to control the acts of their animals. This is done so that onlookers cannot order the animals to do various tricks.

We might note, too, that our communication with animals is rigidly limited. If we asked a dog a question, we could train him to bark once for one kind of response and twice for another kind of response. If we asked him a different question, however, he could not give an adequate response. The dog's ability to communicate then is limited in that he cannot transfer his training from one situation to another. The human being can.

Probably the best way to illustrate the difference between the abilities of animals and the abilities of humans to communicate can be shown by discussion of those interesting cases where human children have been lost and supposedly grew up with animals. Kipling's THE JUNGLE BOOK, for example, recounts the tale of Mowgli, the boy who grew up with a wolf family. In this story, Kipling implies that human children can talk in a kind of human language to animals. It is important to remember that this is only a story, and the evidence from actual cases suggests that the human child that did not learn a language from other humans makes only a series of squeals, grunts, and cries such as would be made by any other human child who had not learned, by imitating his parents, the words of our language.

Roger Brown, in his book WORDS AND THINGS, tells of a young boy of twelve who had been living in the forests of France for five years. When captured, the boy could make no sounds other than the squeals and grunts that any animal can make. After a time, however, the boy *did learn* some words. No matter how often and persistently animals have been taught these things, they have never succeeded.

Perhaps the best answer to the question posed at the beginning of this article is this: man seems able to learn an unlimited number of patterns to describe present, past, and future matters. In addition, man can change his language by producing new elements as he finds it necessary to do so. If a wolf pup and human child were isolated together for a time, neither would be able to do much more than communicate by means of basic squeals and grunts. If both were taught to learn the language of the human, however, only the human child would be able to master it.

Worksheets and Writing Assignments for

UNIT 701

INTRODUCTION TO THE STUDY OF LANGUAGE

Grade 7

CAUTIONARY NOTE

These materials are for experimental use by Project English Fellows and their associates who contributed to their development.

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UNIT 701

Name ______________________________

WORKSHEET #1

1. Explain the difficulty here. What is the basic principle that alice doesn't understand?

2. In the last paragraph, Lewis Carroll tells what it was about the scene that made it so memorable for Alice. Decide which words or phrases in the last paragraph give you the strongest impression of what the scene was like, and list them below. Put the words that stand for abstract ideas in the first column, and the ones that stand for concrete things in the second.

ABSTRACT	CONCRETE	SENSES

3. What would be the matter if the directions read "Put the abstract words in the first column, and the concrete ones in the second?

4. For each word or phrase you decided was concrete, list in the third column the sense it appeals to. Some of them may be associated with more than one of the senses -- sight and sound, for instance.

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WORKSHEET #2

Name of Theory	What the Theory Claims About Origin of Language	Specific Support for the Claim	Kind(s) of Support
1. Gesture	Human language grew out of a kind of pantomime	Certain gestures came to be associated with certain meanings	Opinion and example
2. Ding-Dong			
3. Bow-Wow			
4. Yo-He-Ho			
5. Child Babbling			

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WORKSHEET #3

Directions: Notice that some spaces on the worksheet have been completed already. In general, your job is to complete the rest of the worksheet. You will always need to complete column three (form of support) and column four (whether you think the support is adequate).

Columns one and two (claim and specific support) work a little differently. If the worksheet lists a claim, you must write in the specific support for that claim that you remember from the article. If the worksheet lists specific support you must write in the claim that you remember from the article.

CLAIM	SPECIFIC SUPPORT	FORM OF SUPPORT	Do you think the support is adequate?
1. Animals can communicate some kinds of message	1.	1.	1.
2. Human communication has the feature of productivity	2.	2.	2.
3.	3. Animals can show how they feel at the moment but not how they felt last week	3.	3.
4. Human communication is more flexible than animal communication	4.	4.	4.
5.	5. If a wolf pup and a human child were both taught a human language, only the human child would learn it. If both were taught "wolf language," both would learn it.	5.	5.

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WORKSHEET #4

On this worksheet you are asked to do the same kinds of thing with lists of foreign words that we did with the Japanese words in class. The words in the left-hand columns are the originals, usually English words. The ones on the right are the words as they are pronounced in the other language. On the basis of the pronunciation change from column one to column two, you should be able to make some general statements about the way sounds are used to make words in that language. You should be prepared to give evidence for any statement you make.

Do not be misguided by the spelling! Think about the way the word sounds. If you have questions about how to pronounce the words, ask your teacher.

Keep these considerations in mind:

> Does there seem to be a limit to the number of consonants that can occur together?
>
> Is there more than one possible phoneme that might be substituted when the English phoneme does not occur in the foreign language?
>
> Do some sounds seem to occur only at the beginning, middle, or end of words?

Part One

Below is a list of proper names and place names as they are written in English, and a list of similar names as they are pronounced by speakers of Greek. The Greek words did not necessarily develop from the English words, of course; the names "Damascus" and "thamaskos" probably both came from what the people of Damaskus call their own city.

In the space below, make as many statements as you can comparing the consonant systems of Greek and English. For each statement, give an example from column 2.

Column 1	Column 2
Shakespeare	sekspiros
Manchuria	mantsuriya
Salmatia	thalmatiya (th as in "that")
James	dzems
Damascus	thamaskos (th as in "that")
Britain	vretaniya
David	thavith (th as in "that")
John Kennedy	dzan kennethy (th as in "that")
Warsaw	varsoviya
Washington	vasington
Michigan	misigan
China	keena
Massachusetts	massatsusetts

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WORKSHEET #4, continued

Part Two

Chamorro, the language of the island of Guam, has borrowed many words from Spanish. Naturally, these words changed in pronunciation according to the sound system of Chamorro. From the examples given below, what can you tell about the sounds of Chamorro, compared to the sounds of Spanish? (Do not work with the English words; they are given only for your information.)

English	Spanish	Chamorro
rival	rival	ribat
wine	vino	bino
enclosure	corral	colat
widow	viuda	biuda
coal	carbon	catbun
fisherman	pescador	pescadod
meat	carne	catne
rosebush	rosal	rosad

Part Three

From the examples below of English words that have been taken into the Arabic language, what can you say about Arabic sound structure?

English	Arabic
Plymouth	blymous
sandwich	sandawish
Sphinx	sphinkus
Athena	atena
Pepsi-cola	bipsi-cola
(potato) chips	ships
Opel	obel
Pontiac	bontiac
ping-pong	bing-ga-bong
metro	mitro
(Elvis) Presley	brisley
Shakespeare	shikuzbeare
Wordsworth	wordeswors
James	zhims (zh as in "vision")
James Dean	zhimzadean
Spenser	zbinser

(OPTIONAL)

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WORKSHEET #5

In the following exercises, be sure to work always from the sound of the words, not from the spelling.

How many phonemes are there in these words?

saddle (5)
genuine (7)
tension (6)
attention (7)
mingle (6)
roughage (5)
sheath (3)
poems (5)
rogue (3)

Which of these made-up words conform to the sound patterns of English? Which ones would you not expect to find in our language?

	Could be English	Could not be English
clusht	(✓) (cling rushed)	
pnim		(✓)
hlunk		(✓)
thrimp	(✓) throb shrimp	
rigl		(✓)
hibd		(✓)
turld	(✓) world	
sprunts	(✓) springs	
knig		(✓)

How many morphemes are there in the following words?

pesky (2)
orange (1)
flies (2)
Midwestern (4)
unpinned (3)
rascal (1)
kingdom (2)
tobacco (1)
reaction (3)

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GRADE 7

Writing Assignment I

Part I

Directions: List in Column 1 activities in which you engage in which no language is involved. In Column 2, list activities you participate in in which language is involved.

COLUMN 1 Activities Not Involving Language	COLUMN 2 Activities Involving Language

Part II

Directions: Summarize the major activities that you would have to give up if you could not speak, read, write, or listen. List three, giving the most important first.

1.

2.

3.

Directions: Write one summary sentence telling which language activity you would miss most if you were unable to speak, read, write, or listen.

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Option to Assignment I

One good way to find out just how important language is to us is to stop using it. Suppose everybody in the class agreed to stop communicating with language for a certain period of time, say 3:30 this afternoon till 8:00 tonight. You couldn't talk, or write messages, or use a language code of any kind. Imagine some of the difficulties you would get into, and write a story about what might happen.